

# **Colorado Desert Subregion ACEC Units**

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#### **Alligator Rock**

National Conservation Lands Ecoregion: Colorado Desert

**Description/Location:** In Riverside County just south of Desert Center and Interstate 10 at the north end of Chuckwalla Mountains.

#### **Nationally Significant Values:**

**Ecological Values:** Alligator Rock is within USFWS designated critical habitat for the desert tortoise and is within an area identified by the USFWS as being important for habitat connectivity between tortoise populations in Joshua Tree National Park and the Chuckwalla ACEC. The Alligator Rock area is proposed to be included within the larger Chuckwalla NLCS unit.

**Cultural Values:** Many factors contribute to the national significance of cultural values associated with the Alligator Rock area that is currently designated as a National Register District and an ACEC. The area is unique in that it provides for the largest and most well preserved assemblage's of late prehistoric and archaic era petroglyphs representing human habitation over several thousand years. The petroglyphs feature several geographically distinct stylistic motifs linking the interior deserts, the Great Basin, and the coast. One stylistic motif has yet to be explained by local rock art specialists, some say they are "ringing rocks" (rocks that produce a percussive sound) yet other researchers claim some as yet unknown function. The ACEC is a critically important cultural use site for a variety of tribes that claim ancestral ties with the Chuckwalla Valley. This area, which today incorporates the interstate 10 corridor, has been a main thoroughfare for transportation and trade for millennia, as a "natural topographic funnel" and a "least cost path" directing people from points east to west from the Pacific coast to the interior southwest. Ancient "Lake Cahuilla" would have blocked east to west travel further south to several miles south of the international border, and to the north the Transverse Ranges were a significant obstacle to overcome. Prehistoric foot trails are still visible across the ACEC, and the Chuckwalla mountains where the geologically stable desert pavement has preserved them. There are numerous associated artifacts and petroglyphs located along these trail segments. It is also a site of high religious importance to many tribes and also associated with several spiritual trails and songs associated with local tribes, rooted deep in their oral histories. Two sites within this ACEC are listed in National Register of Historic Places and the ACEC contains an array of known potentially NRHP eligible prehistoric archaeological sites. It is representative of unique geologic features and outcrops, and hosts a distinct source of a gray-green, speckled, felsic toolstone that ihas been documented in archaeological sites throughout the Chuckwalla Valley. Flakes and cores of this felsic toolstone have been located as far away as the banks of the Colorado River flood plain. A large wash running north out of the Chuckwalla Mountains at CA-RIV 1383 features several Tenajas above and below intermittent waterfalls, which likely served early peoples with a seasonal source of water.

The site also features several cleared circles – one of the largest known in the area - and rock rings that have been ethnographically identified as "dreaming circles" which according to Native American elders are very important in Native American spiritual beliefs. The particular areas of the site that feature petroglyphs and cleared circles are also strategic areas that command a wide, clear view of the landscape from an elevated position, and are within the viewshed of the entire Chuckwalla Valley including other important Native American spiritual sites.

**Scientific Values:** The area provides significant opportunities for research that could contribute substantially to knowledge of early inhabitants, their use of early ecosystems, early migration patterns, as well as early tribal interactions that have never been studied. An ongoing rock art study and large scale GIS based spatial documentation of CA-RIV 1383 is currently being performed by specialists in the field and will

likely yield new information for the archaeological record and some insight into rock art use, meaning, and purpose in prehistoric Native American culture.

Special Designations/Management Plan/Date: ACEC Plan No. 78 Dtd: 10/03/1986

Relevance and Importance Criteria: National Register Sites; CA-RIV-1383, North Chuckwalla Mountains Petroglyph District; and CA-RIV-1814, The North Chuckwalla Prehistoric Quarry. Some areas within the ACEC provide a combination of meteorological, geological, hydrological, topographical features that have been identified as important climate refugia (slow/minimized climate changes) for wildlife species.

Recreation Area: This unit overlaps with Chuckwalla SRMA.

**Overarching Goals:** To preserve and protect cultural and spiritually significant resources values while providing for compatible public uses.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

**Designation and Acreage by Alternative:** 

Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	6,800	0	NA
Preferred Alternative	6,212	6,800	0	0.5%
1	0	6,800	0	1%
2	6,800	6,800	0	0.5%
3	6,200	6,800	0	0.5%
4	2,600	6,800	0	0.5%

<sup>\*</sup> Acreage values are for BLM managed lands

Objectives(desired future conditions) / Allowable Uses/Management Actions	Resource
Objective: Protect desert pavement and other soils and geologic features	Soil, water, air
important to the cultural resources of the site.	
Action: ACEC is limited to designated routes, surface disturbance limited to 1%	
with mitigation and compensation for impacts to ACEC values.	
Objective: Protect vegetation in ACEC.	Vegetation -
Action: ACEC is limited to designated routes, surface disturbance limited to 1%	Including special status
with mitigation and compensation for impacts to ACEC values.	plant species
Objective: Recovery of desert tortoise (ACEC is within Tortoise Recovery Area)	Fish and Wildlife -
Management Actions: ACEC is limited to designated routes, surface disturbance	Including special status
limited to 1% with mitigation and compensation for impacts to ACEC values.	fish and wildlife species
Objective 1: Protect biodiversity and manage for resilience (protect climate	Climate Change and
refugia and provide for migration corridors).	Adaptation
Management Action 1: Prioritize habitat enhancement in areas expected to	
provide for the greatest level of resiliency (good response or rehabilitation	
results after significant disturbance such as fire) and or resistance to change	
(e.g. climate refugia).	
Management Action 2: Consider actions that enhance the primary productivity	
of climate refugia with native species restoration, reduced soil surface	
disturbance, and habitat infrastructure to increase carrying capacity of refugia	
(e.g., wetland, oasis).	
Management Action 3: Maintain migration corridor integrity by minimizing	
obstructions (fences, roads), disturbances (limiting access to water and shade	
during peak temperatures) and habitat fragmentation.	
<b>Objective 2</b> : Maintain and or enhance key ecosystem processes (e.g., carbon	
sequestration, water residence time)	
Management Action 1: Develop proactive and responsive management actions	
for potentially dangerous and damaging disturbances to the environment,	
which are exacerbated by climate change (e.g. wildfire, flash floods, etc.).	
Management Action 2: Minimize carbon sequestration losses from	
management activities by reducing impacts to vegetation, soil structure and soil	
biota.	
Objective: Protect culturally significant landscape.	Trails and Travel
Management Actions: OHV limited to designated routes per NECO plan.	Management
Objective: Protect culturally significant landscape.	Recreation
Management Actions: Limit recreation uses to interpretation of cultural values.	

Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure
Objective: Protect culturally significant landscape.	Rights of Way (ROW)
Management Actions: Limit ROWs to designated corridor through the ACEC.	
Not an allowable use. Renewable energy development is not compatible with	Renewable Energy
NLCS and ACEC unit values and criteria.	
<b>Geothermal:</b> ACECs are closed to geothermal leasing and development unless	
they overlap with a DFA where geothermal is allowed. Where there is overlap,	
ACECs are open to geothermal leasing with an NSO stipulation.	
Objective: Protect culturally significant landscape.	Locatable Minerals
Management Actions: Open to locatable minerals, limited to 1% disturbance	Mineral Materials
cap.	Non-Energy Leasable





# Alligator Rock

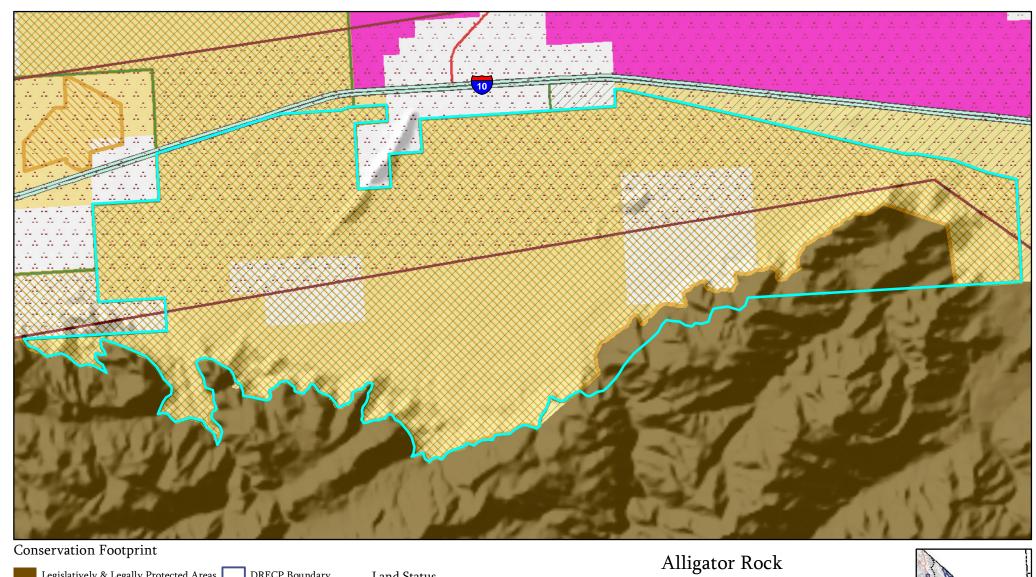
6/23/2015











# Legislatively & Legally Protected Areas National Conservation Lands Proposed ACEC DRECP Boundary Land Status Bureau of Land Management Transmission Corridor Renewable Footprint Development Focus Areas

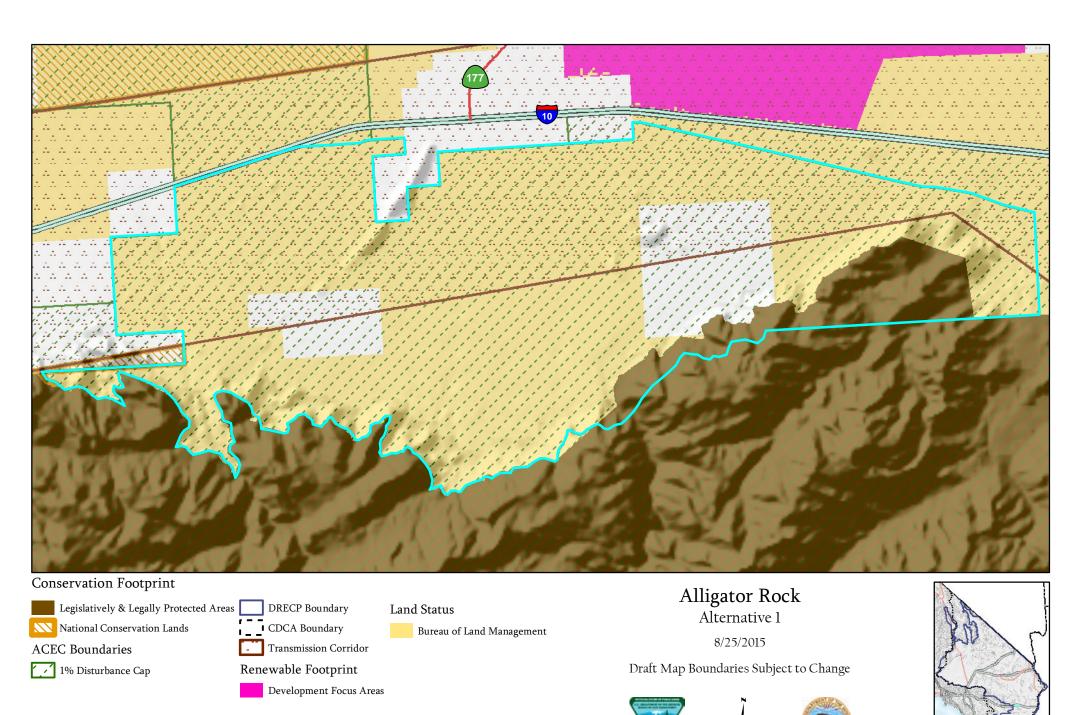
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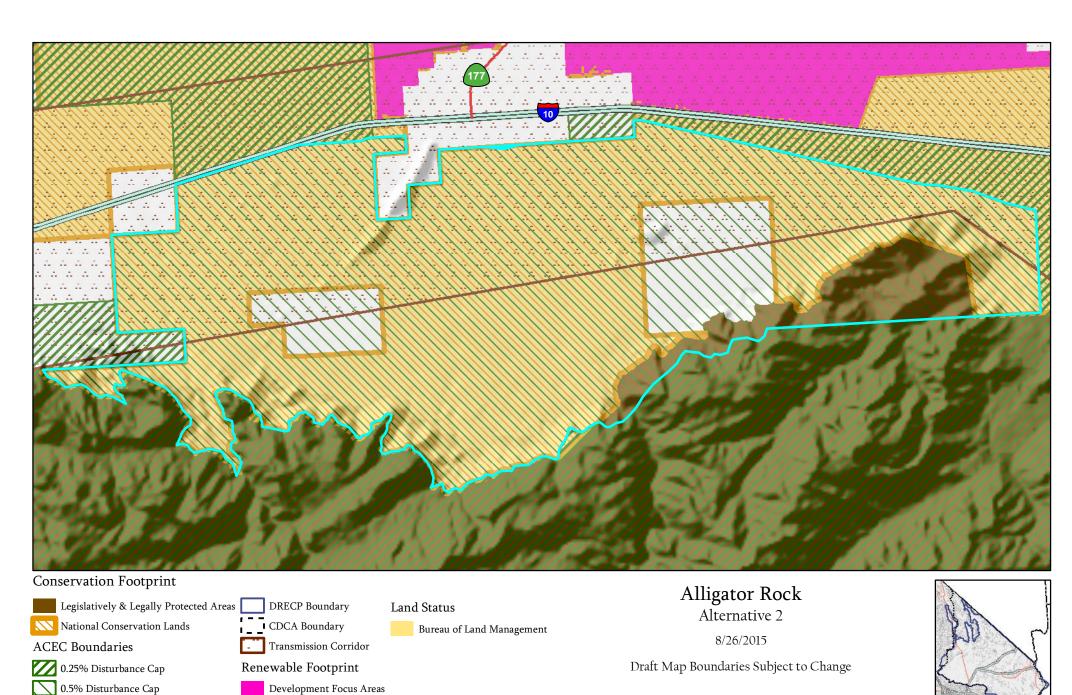








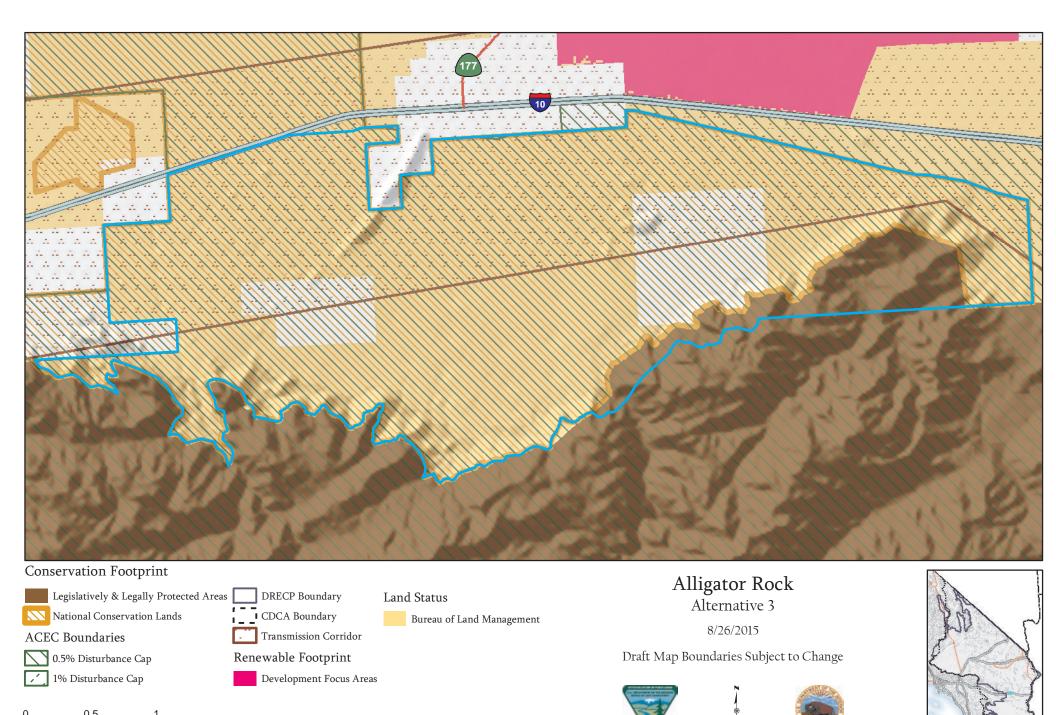
0.5

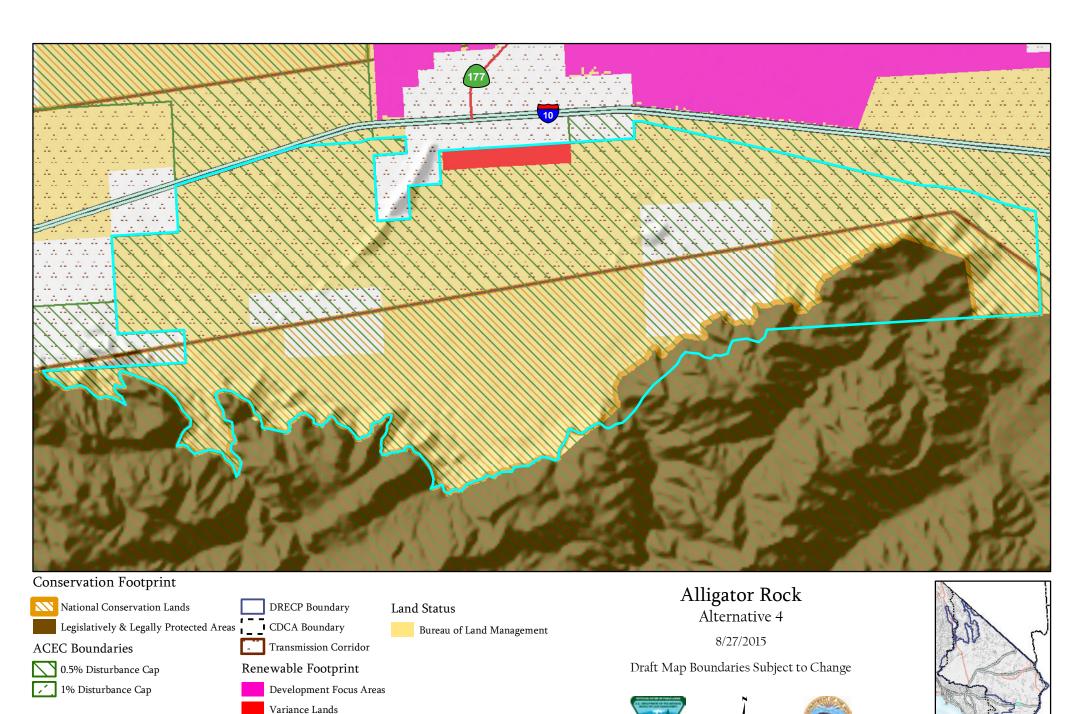




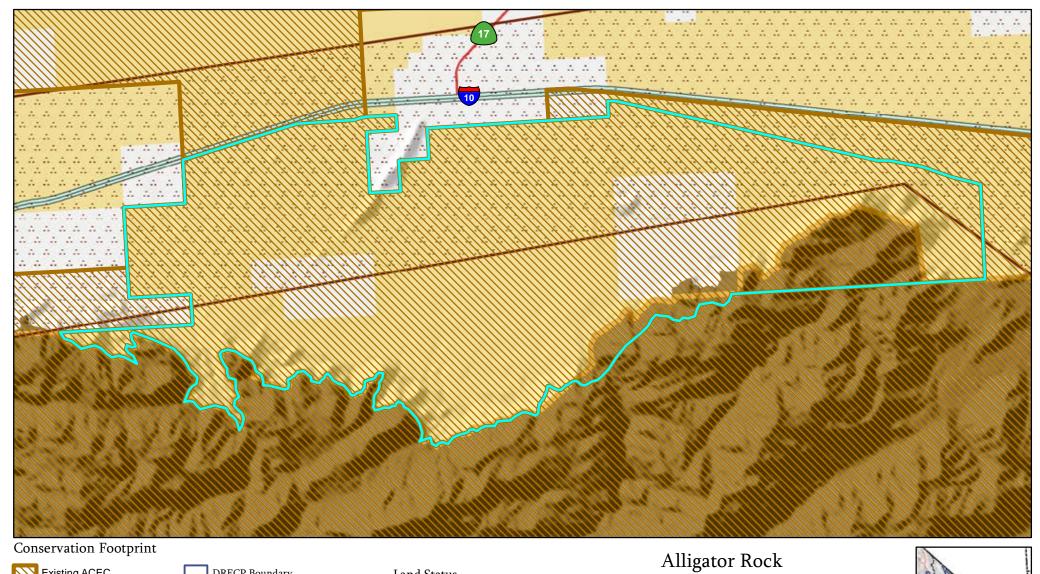
1% Disturbance Cap 0.5

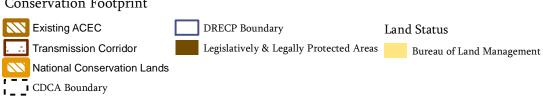
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0.5





Alligator Rock No Action

9/15/2015

Draft Map Boundaries Subject to Change









Miles

#### **Cadiz Valley**

National Conservation Lands Ecoregions: Colorado Desert and South Mojave - Amboy

**Description/Location:** North of Hwy 62, south of Hwy 40 between the Sheep Hole mountains to the west and the Chemehuevi ACEC to the east.

#### **Nationally Significant Values:**

Desert shrub lowlands, dry lake beds and low laying dunes occupy much of the Cadiz Valley. Salt Evaporators, Mining and agriculture have in the past and currently occur within the valley.

#### **Ecological:**

The Cadiz Valley contains an enormous variation of Mojave vegetation, from Ajo Lilies to Mojave Yucca. Bighorn, deer and mountain lion easily migrate between basin and range mountains of the Sheephole, Calumet Mountains, Iron Mountains, Kilbeck Hills and Old Woman Mountains with little or no human infrastructure limits.

#### **Cultural:**

Remnants of the ranching, mining and railroad activities of the late 19<sup>th</sup> and early 20<sup>th</sup> century are evident in the presence of Route 66, old homesteads, cemeteries, stamp mill and mining sites located within the area.

#### **Scientific:**

Geological studies occur along the Barstow-Bristol trough a conspicuous west-northwest trending physiographic feature which straddles the boundary between the Mojave and Sonoran tectonic blocks is adjacent to the area.

**Lands with Wilderness Characteristics:** This unit contains 16,226 acres of lands that would be managed to protect wilderness character under the preferred alternative. The CMAs for lands managed to protect wilderness character would also apply in those areas.

Recreation Area: This unit overlaps with Cadiz Valley ERMA, National Trails SRMA and Ward Valley ERMA.

**Special Designations/Management Plan/Date:** No previous special designation.

#### **Relevance and Importance Criteria:**

Relevant biological resources including wildlife and plant assemblages. Some areas within the ACEC provide a combination of meteorological, geological, hydrological, topographical features that have been identified as important climate refugia (slow/minimized climate changes) for wildlife species. The area is critical for bighorn sheep, Mojave fringed toed lizards, desert tortoise, burrowing owl and several bat species. Additionally, numerous rare and sensitive plants have major populations in the valley, making the area regionally significant.

**Overarching Goals:** Protect biological values, including habitat quality, populations of sensitive species, maintain climate refugia and landscape connectivity while providing for compatible public uses.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the

Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e., management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

#### **Designation and Acreage by Alternative:**

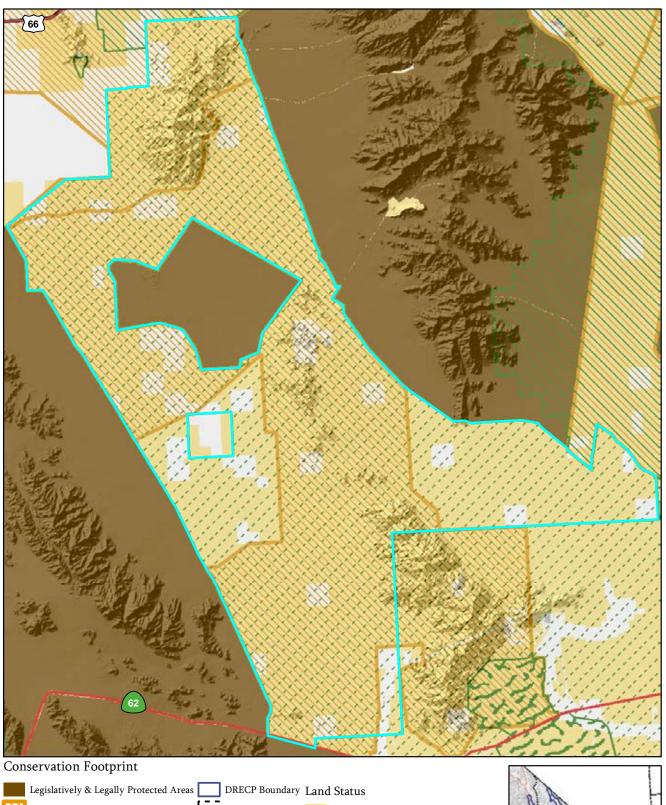
	<u> </u>			
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	0	0	NA
Preferred Alternative	145,015	190,823	0	1%
1	11,400	19,200	213,310	1%
2	232,500	232,500	0	0.25%
3	73,100	232,500	0	1%
4	62,200	19,200	213,313	0.10%

<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
Objective: Retain existing flow regime and volume	Soil, water, air
Action: Secure Federal Reserve Water Right	
Objective: Maintain or Improve condition of vegetation	Vegetation (incl. special
Action: Remove invasive plants, rehabilitate/revegetated disturbed areas.	status species)
Action: Protect populations of special status plants	
Cadiz Dunes Psammophytic Plant Community UPA	
Special Status Species: Nelson Desert Bighorn Sheep	Fish and Wildlife (incl.
Action: Evaluate water sources and determine if artificial water sources should	special status species)
be developed.	
Special Status Species: Desert Tortoise	
Action: Maintain viable populations and connections between other ACECs and	
critical habitat.	

Special Status Species: Mojave fringed toed lizard Action: Maintain viable populations; ensure connectivity between occupied habitat Protect habitat and source of sand.	
Objective 1: Protect biodiversity and manage for resilience (protect climate refugia and provide for migration corridors).  Management Action 1: Prioritize habitat enhancement in areas expected to provide for the greatest level of resiliency (good response or rehabilitation results after significant disturbance such as fire) and or resistance to change (e.g. climate refugia).  Management Action 2: Consider actions that enhance the primary productivity of climate refugia with native species restoration, reduced soil surface disturbance, and habitat infrastructure to increase carrying capacity of refugia (e.g., wetland, oasis).  Management Action 3: Maintain migration corridor integrity by minimizing obstructions (fences, roads), disturbances (limiting access to water and shade during peak temperatures) and habitat fragmentation.  Objective 2: Maintain and or enhance key ecosystem processes (e.g., carbon sequestration, water residence time) and prepare and respond to significant disturbances to the environment (e.g. floods).  Management Action 1: Develop proactive and responsive management actions for potentially dangerous and damaging disturbances to the environment, which are exacerbated by climate change (e.g. wildfire, flash floods, etc.).  Management Action 2: Minimize carbon sequestration losses from management activities by reducing impacts to vegetation, soil structure and soil biota.  Management Action 3: Leverage disturbance events and other landscape changes, when possible, as opportunities to assess climate adaptation actions. For example, revegetation objectives for projected climate scenarios benefiting multiple ecosystem services (habitat and carbon sequestration objectives).	Climate Change and Adaptation
<ul> <li>Goal: Provide for the use of a designated system of Ground Transportation Linear Features to ensure access to the public for appropriate uses. Action, following the Travel Management Plan: <ul> <li>All legal open roads and trails will be signed including road or trail number/name.</li> <li>All roads and trails identified as closed will be rehabilitated/restored.</li> <li>Restore all undesignated roads or trails.</li> <li>Provide routine maintenance of the designated roads and trails system including installation of routine signs, markers, culverts, ditches, water bars, barriers, gates, or cattle guards on/or adjacent to system roads and trails.</li> </ul> </li></ul>	Trails and Travel Management

<ul> <li>Refer to the National Trails Special Recreation Management Area (SRMA) and the Cadiz Valley, Lava Hills, and Ward Valley Extensive Recreation Management Area (ERMA) write-up for detailed objectives, allocations, and management direction.</li> <li>Goal: Manage recreation consistent with established conservation goals, while providing a broad range of recreation opportunities and to ensure public health and safety;</li> <li>Action:         <ul> <li>Provide interpretive, directional, and regulatory signs and materials as necessary to provide public information and reduce impacts from recreational use.</li> <li>Allow stopping and parking within 25 feet, and camping within 100 feet of designated routes.</li> <li>Manage recreational shooting consistent with state and local laws.</li> <li>Allow SRP events which do not negatively affect ACEC Relevance and Importance Values.</li> <li>Issuance of Special Recreation Permits for day use or overnight use up to 14 consecutive nights; that impact no more than 3 staging area acres; and/or for recreational travel along roads and trails designated open in the land use or accompanying activity level plans.</li> </ul> </li> <li>Area would be managed within the Cadiz Valley ERMA, National Trails SRMA and Ward Valley ERMA.</li> </ul>	Recreation
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure
Objective: Protect resource values of the ACEC	Rights of Way
Management Action: Land use authorization proposals (new, renewal, and	Nights Of Way
amendment) will be analyzed on a case-by-case basis to assess whether they	
are compatible with the ACEC and its management goals	
Closed to renewable energy development.	Renewable Energy
Geothermal: ACECs are closed to geothermal leasing and development unless	
they overlap with a DFA where geothermal is allowed. Where there is overlap,	
ACECs are open to geothermal leasing with an NSO stipulation.	
There are important salt and mineral deposits in dry lake beds within this	Locatable Minerals
region.	Mineral Materials
Open mineral entry w/ stipulations	Non-Energy Leasables
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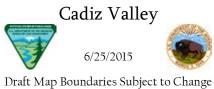




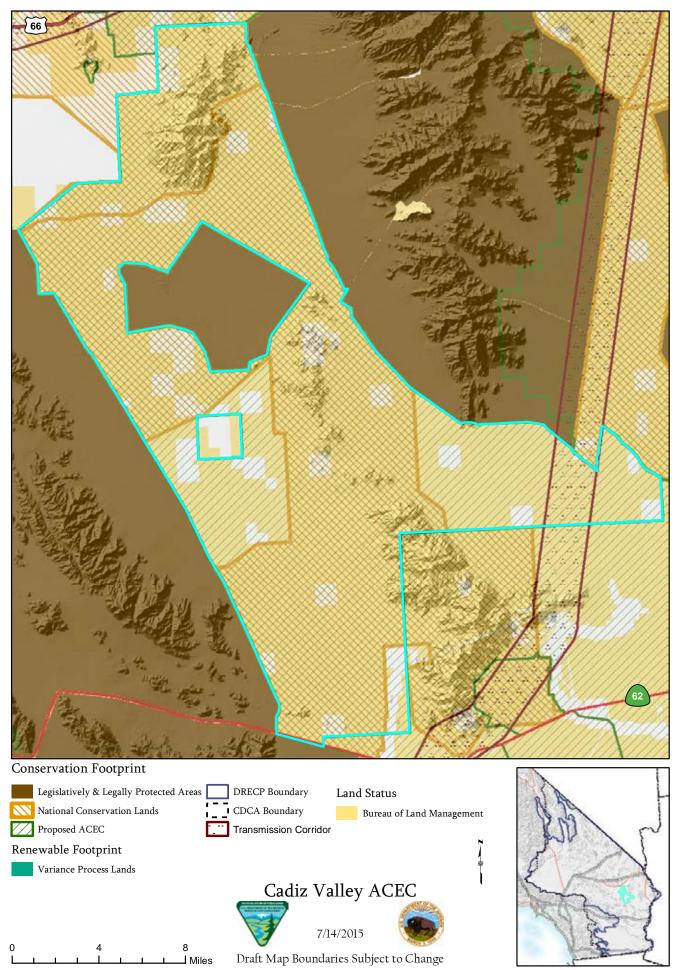
#### **ACEC Boundaries**

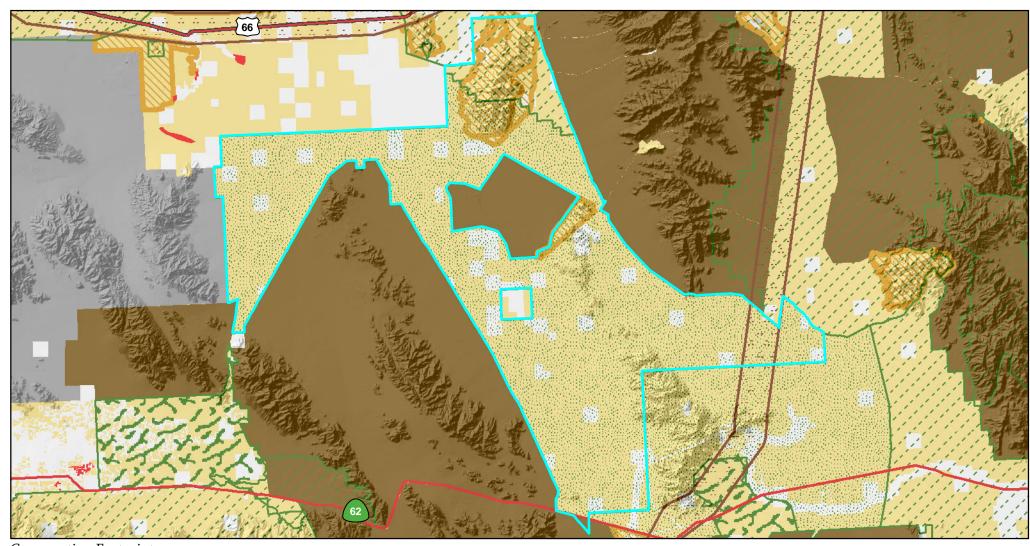
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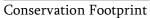
1% Disturbance Cap











Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation

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# DRECP Boundary

CDCA Boundary

Transmission Corridor

Bureau of Land Management

Department of Defense

Land Status

#### Renewable Footprint

Variance Lands

# Cadiz Valley

Alternative 1

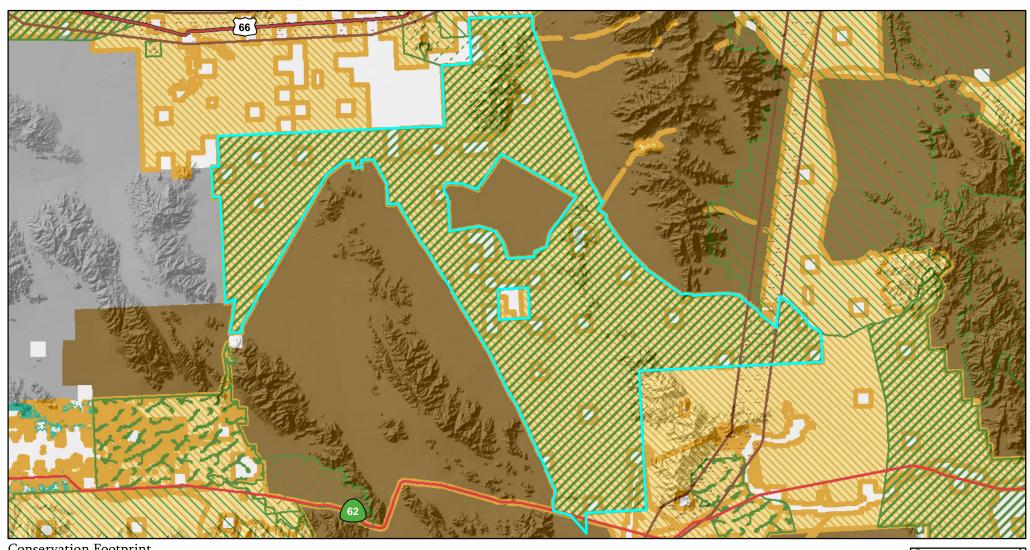
8/25/2015











#### Conservation Footprint

Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

**77** 0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

# DRECP Boundary CDCA Boundary

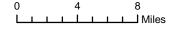
Transmission Corridor

Bureau of Land Management Department of Defense

Land Status

## Renewable Footprint

Future Assessment Areas



## Cadiz Valley Alternative 2

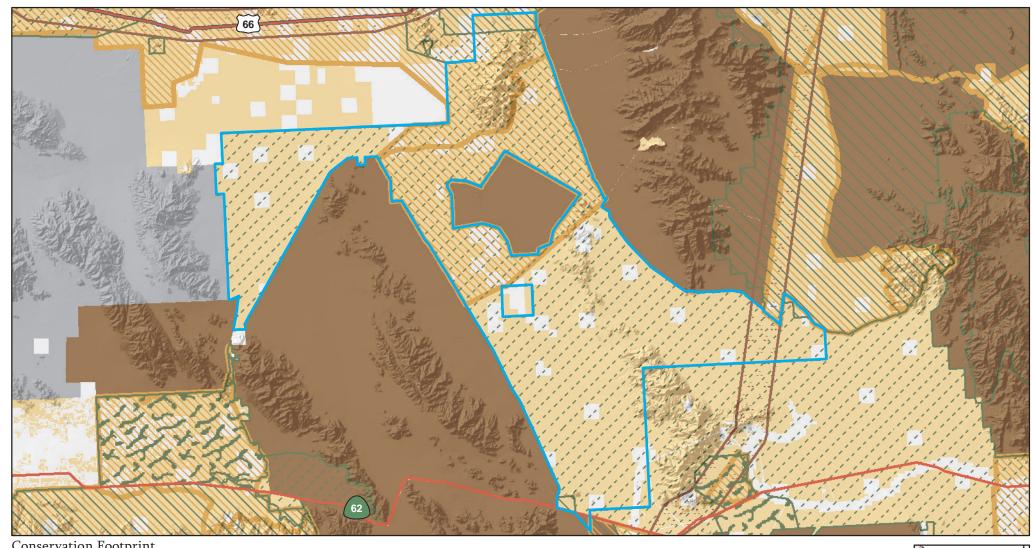
8/26/2015











#### Conservation Footprint

Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

0 2 4 Miles

#### DRECP Boundary Land Status CDCA Boundary

Bureau of Land Management Transmission Corridor Department of Defense

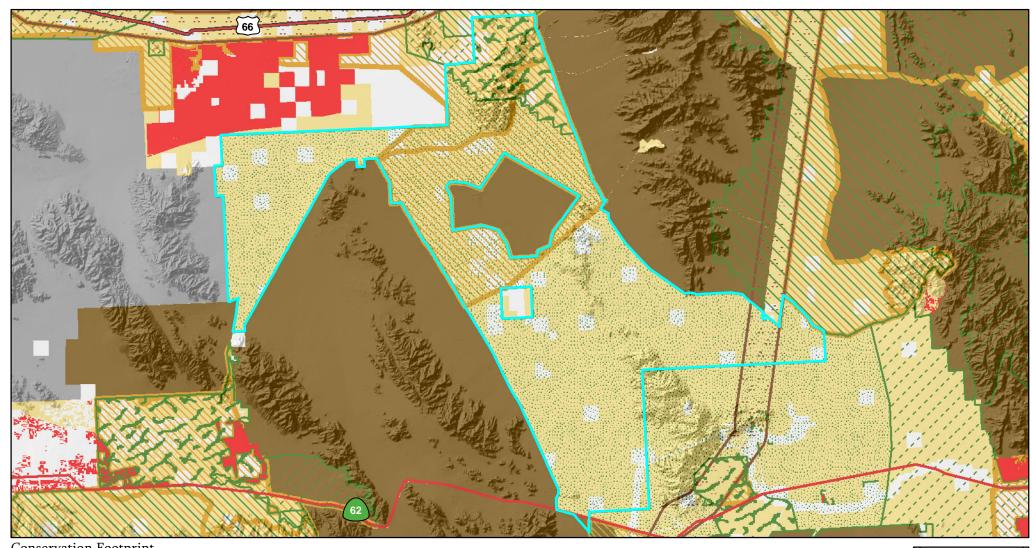
Cadiz Valley Alternative 3 8/26/2015









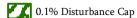


#### Conservation Footprint



Legislatively & Legally Protected Areas CDCA Boundary

#### **ACEC Boundaries**



0.5% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation

DRECP Boundary

Bureau of Land Management Transmission Corridor Department of Defense

Land Status

Renewable Footprint

Variance Lands

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## Cadiz Valley Alternative 4

8/27/2015









#### Chuckwalla

**National Conservation Lands Ecoregions:** Colorado Desert, Pinot Lucerne Valley and Eastern Slopes, Coachella Valley, and Lake Cahuilla

#### **Description/Location:**

The proposed Chuckwalla area is located in southeastern Riverside County and northeastern Imperial County, and encompasses the Orocopia, Chuckwalla, Little Chuckwalla, and Palo Verde mountains and the intervening alluvial fans, washes and valleys. The area contains the Chuckwalla Bench, an elevated area of coalescing alluvial fans between the Chuckwalla and Chocolate mountains, and the extensive Milpitas Wash in Imperial County.

#### **Nationally Significant Values:**

#### **Ecological**:

- The Chuckwalla area is the most outstanding representative of the Colorado Desert in California with a full complement of characteristic wildlife and plant species.
- The entire area is USFWS designated critical habitat for the Federally threatened Agassiz's desert tortoise and contains areas of exceptional desert tortoise densities, the highest known in the Sonoran Desert.
- A large number of BLM sensitive animals are also resident in the Chuckwalla :Gila Woodpecker, Burrowing Owl, Elf Owl, Crissal Thrasher, Palm Springs Pocket Mouse, Pallid Bat, Western Mastiff Bat, Desert Bighorn Sheep
  - The flora is one of the most botanically diverse in the California Desert with 158 plant species including several species found nowhere else, most notably the Mecca aster (BLM Sensitive Species), Orocopia sage (BLM Sensitive Species), and the tree-like Munz's cholla (BLM Sensitive Species) which grows 6-13 feet tall. *Cylindropuntia chuckwallensis* is a newly described narrow endemic cactus from the area (*Madroño* **2014** 61 (2), 231-243).
- The washes and foothills provide excellent habitat for burro deer, a subspecies of mule deer found only in the Sonoran Desert. This area is considered the most important habitat for this subspecies in California.
- The Chuckwalla Bench contains the best remaining habitat in California for the Federally
  endangered Sonoran pronghorn. It was the last area in California where this species occurred and,
  according to a recent report by the USFWS Sonoran Pronghorn Recovery Team, is considered the
  most suitable area for its reintroduction, which is considered crucial for the recovery of the species.
  A reintroduction program involving BLM, USFWS, and CDFW is currently underway.
- The Chuckwalla Valley Dune Thicket, in the northeastern corner of the proposed Chuckwalla unit, contains unusually dense pockets of microphyll woodland and has the highest known winter bird densities in the California Desert, as well as especially high densities of reptiles and mammals.
- Milpitas Wash, in the southeastern portion of the proposed NLCS unit, is the most extensive classic Sonoran Desert microphyll woodland in the California Desert.
- Corn Springs, located in a canyon deep in the Chuckwalla Mountains, supports a rich stand of
  riparian vegetation that includes native California fan palms (unique to the Colorado Desert),
  mesquite, catclaw, desert willow, and smoke trees. Corn springs supports abundant wildlife and is
  important for migratory birds. The lush vegetation at the oasis combined with the rugged colorful
  surrounding canyon walls rank it as one of the more scenic areas in the CDCA.

#### **Cultural:**

Many factors contribute to the national significance of the cultural values associated with the proposed Chuckwalla unit. Keys areas, described below, are Alligator Rock, Corn Springs, and the Bradshaw Trail.

- Alligator Rock is a microcosm of the archaeology of the Colorado Desert. It contains examples of
  most of the site types that are common to the Colorado Desert as well as some site types that are
  uncommon. It tells a story of resource procurement, trade, and travel carried out by mobile
  populations in a harsh environment. The area is currently designated as a National Register District
  and an ACEC.
- Corn Springs was an occupation site for prehistoric Native Americans. Impressive petroglyphs
  consisting of approximately 600 design elements, a series of trail segments with pottery and lithic
  debitage and bedrock mortars have all been recorded at the site. There is a long history of mining in
  the Corn Springs canyon and tributary canyons dating back to the last century.
- The Historic Bradshaw Trail bisects the proposed Chuckwalla unit and is an important remnant of a formative period in the history of the desert Southwest. It was established to link the Arizona gold mine camps at La Paz (Ehrenberg) with Los Angeles in the 1860s. The BLM designated the route as a National Back Country Byway in 1992. The Bradshaw trail was blazed with the aid of Chief Cabezon and several other Native Americans based on their knowledge of water sources along a pre-existing prehistoric trail system.

Scientific Values: Although the world renowned rock art site at the mouth of the canyon has been studied by many, the entire canyon area and its tributary canyons remain virtually unstudied. It is likely that toolstone procurement areas exist that are scattered throughout the Chuckwalla Mountains, and other petroglyphs continue to be discovered and reported today. The Trail system that transects the canyon from east to west reveal much about the past dealing with trade, transportation of goods, and prehistoric effects on people dealing with climactic changes across the land from the Coast to the inland Southwest. There is ongoing BLM hydrologic and soil monitoring study on the eastern edge of this unit.

#### **Special Designations/Mgmt. Plan/Date:**

Chuckwalla DWMA/ ACEC (2002), Chuckwalla Bench ACEC (1980, which was deleted and subsumed by the larger Chuckwalla DWMA/ACEC), Chuckwalla Valley Dune Thicket ACEC (1980), Corn Springs ACEC (1980), Alligator Rock ACEC (1980), Milpitas Wash HMP (1980, which was deleted and subsumed by the larger Chuckwalla DWMA/ ACEC), Chuckwalla Mountains HMP (1980), Orocopia Mountains HMP (1980), USFWS designated desert tortoise critical habitat (1994)

Relevance and Importance Criteria: Relevant cultural, scenic, vegetative and wildlife values. One of the highest density populations of the Federally threatened Agassizi's desert tortoise in the Sonoran Desert. It is also excellent habitat for burro deer, desert bighorn sheep, and is a priority reintroduction area for the federally endangered Sonoran pronghorn. The extensive microphyll washes serve as excellent habitat for multiple migratory bird species. Certain areas within the ACEC provide a combination of meteorological, geological, hydrological, topographical features that have been identified as important climate refugia (slow/minimized climate changes) for wildlife species. The ACEC serves as an outstanding representative of the Sonoran Desert with a full complement of the characteristic wildlife and plant species. The ACEC provides unique opportunity for multiple use management- aside from its rich wildlife and botanical resources, it has been utilized extensively for outdoor recreation. The proposed extension of the Chuckwalla unit is in an area of higher value desert tortoise habitat (2009 USGS Desert Tortoise Habitat model). It would provide critical desert tortoise habitat connectivity between the two major desert tortoise populations identified in the Colorado Desert (i.e., the Chuckwalla and Chemehuevi populations) through Joshua Tree

National Park. The area is also the designated desert tortoise translocation site from surrounding solar projects

Overarching Goals: To protect and enhance habitat for sensitive animal and plant species and rare vegetation alliances within the ACEC while considering climate changes and reducing hazards to public safety and providing for compatible public uses. Priority wildlife species include the Agassizi's desert tortoise, desert bighorn sheep, and burro deer. Priority plant species include three endemic plant species: Mecca aster, Orocopia sage, and the Munz's cholla. Priority rare vegetation alliances include Blue Paloverde-Desert Ironwood Woodland and Smoketree Woodland. Carbon storage and sequestration associated with vegetation communities is an important consideration for management. Maintain habitat connectivity between the proposed Chuckwalla NLCS unit and Joshua Tree National Park.

Bighorn Sheep management goals and objectives are described in Section 2.3.1 in the NECO Plan. Protect the cultural values of the Alligator Rock, Corn Springs, and Bradshaw Trail. Areas near the upper bajadas and at the base of the Chuckwalla Mountains have stable geologic surfaces and desert pavements where prehistoric trails are well preserved. Areas skirting the trails commonly feature archaeological sites with ceramics, groundstone and flaked stone evidence. If a natural water source is nearby, larger sites with petroglyphs are likely present.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

#### **Designation and Acreage by Alternative:**

	<u> </u>			
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	493,600	0	1%
Preferred Alternative	318,762	514,372	0	0.1%, 0.5%, 1%
1	257,500	514,600	0	1%
2	512,400	512,400	0	0.25%
3	338,300	514,600	0	0.1%, 0.5%, 1%
4	301,700	514,500	0	0.1%, 0.5%, 1%

<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future conditions)/Allowable uses/ Management Actions	Resource
Management Action: Restrict construction activities when soils are susceptible to heightened risk of erosion. Limit ground-disturbing activities when soils are	Soil, water, air
wet in order to avoid compaction of soils.	
Comply with the State of California for all proposed actions that would	
contribute to particulate matter emissions.	
Objective: Prevent excessive ground water withdrawal that would potentially	
threatened dune/ playa dependent vegetation.	
Action: Allow no activities that would create a water basin deficit/ decline.	
Objective: Protect the following special status plants and rare vegetation	Vegetation (incl. special
alliances by ensuring habitat is in a stable or improving condition.  Special Status Species:	status species)
Triple-ripped Milkvetch (Astragalus tricarinatus) (Federally listed endangered species)	
Los Animas colubrina (Colubrina californica) (NECO covered, CRPR 2)	
Crucifixion thorn ( <i>Castela emoryi</i> ) (NECO covered, CRPR 2)	
Foxtail cactus ( <i>Coryphantha alversonii</i> ) (NECO covered, CRPR 4)	
Glandular ditaxis ( <i>Ditaxis clariana</i> ) (NECO covered, CRPR 2) California ditaxis ( <i>Ditaxis serrata</i> var. <i>californica</i> ) (NECO covered, CRPR 3)	
Orocopia Mountains Spurge ( <i>Euphorbia jaegeri</i> ) (BLM Sensitive, CNPS 1B –	
now verified in the Palm Springs Field Office área)	
Crown-of-thorns (Koeberlinia spinosa ssp. tenuispina) (NECO covered,	
CRPR 2) Spearleaf ( <i>Matelea parvifolia</i> ) (NECO covered, CRPR 2)	
Munz's cholla ( <i>Opuntia munzii</i> ) (BLM SS, CRPR 1B)	
Desert unicorn plant ( <i>Proboscidea althaeifolia</i> ) (NECO covered, CRPR 4)	
Orocopia sage (Salvia greatae) (BLM SS, CRPR 1B)	
Latimer's Woodland Gilia (Saltugilia latimeri) (BLM SS, CNPS 1B)	
Coves' cassia (Senna covesii) (NECO covered, CRPR 2)	
Mesquite neststraw (Stylocline sonorensis) (NECO covered, CRPR 1A)	
Mecca-aster ( <i>Xylorhiza cognata</i> ) (BLM SS, CRPR 1B)	
Rare Vegetation Alliances:	
Big Galleta Herbaceous (Pleuraphis rigida Herbaceous Alliance)	
Desert-Willow Woodland (Chilopsis linearis Woodland Alliance)	
Blue Paloverde-Desert Ironwood Woodland (Parkinsonia florida - Olneya	
tesota Woodland Alliance)  Smoketree Woodland (Prorethamnus spinosus Woodland Alliance)	
Smoketree Woodland (Psorothamnus spinosus Woodland Alliance) Teddy-bear Cholla Shrubland (Cylindropuntia bigelovii Shrubland Alliance)	
Jojoba Shrubland (Simmondsia chinensis Shrubland Alliance)	
Spinescale Shrubland (Atriplex spinifera Shrubland Alliance)	
Management Action: Develop a more accurate map of the distribution and	

abundance of special status plants (particularly those three endemics listed as BLM SS: Mecca aster, Orocopia sage, and Munz's cholla) and rare vegetation alliances to aid in monitoring, assessing impacts, developing appropriate mitigation and prioritizing any future land acquisitions.

Management Action: Place signs, kiosks and interpretive information at key sites to better inform the public of the protections and natural resource values within the proposed NLCS unit.

Management Action: Sign all primary open routes (Le. Bradshaw Trail, Red Cloud Road, gasline etc.), limited and closed routes with the appropriate standard carsonite sign. Closed routes would also be signed and barricaded or obliterated where appropriate.

Management Action: Increase compliance with resource protections

Management Action: Develop a cooperative agreement with the Navy and Marine Corps to allow for the joint management of the public land within that portion of the Chocolate Mountain Aerial Gunnery Range north of Bradshaw Trail.

Management Action: Limit camping to within 100 feet of designated vehicles routes. Campers would be encouraged to limit use to the five areas on the Bench already receiving such use.

Management Action: Place boundary signs on all major entry roads to identify the proposed NLCS unit, and resource values, illustrate the major routes of travel.

Management Action: Develop a monitoring program to determine the trend of wildlife and vegetation resources within the proposed NLCS unit, determine the effectiveness of the planned actions, and help identify future management needs.

Management Action: Coordinate with Riverside County on the maintenance of the Bradshaw Trail. Ensure that Munz's chollas are avoided during maintenance activities.

Objective: Protect the following special status animals by ensuring habitat is in a stable or improving condition, characteristics of climate refugia are maintained and connectivity corridors are maintained.

Fish and Wildlife (incl. special status species)

Desert bighorn sheep (*Ovis canadensis* subspecies *nelsoni*) (BLMSS) Burro deer (*Odocoileus hemionus eremicus*) Mountain Lion (*Felis concolor*) Palm Springs Pocket Mouse

California last massed bot ///a

California leaf-nosed bat (Macrotus californicus) (BLMSS)

Occult little brown bat (Myotis lucifugus subspecies occultus)

Cave myotis (Myotis velifer) (BLMSS)

Fringed myotis (Myotis thysanodes) (BLMSS)

Fringed myotis (Myotis thysanodes) (BLMSS)

Pallid Bat

Townsend's big-eared bat (*Plecotus townsendii*) (BLMSS)

Pocketed free-tailed bat (Tadarida femorosaccus)

Western mastiff bat (Eumops perotis) (BLMSS)

Colorado Valley Woodrat (Neotoma albigula venustra)

Golden eagle (Aquila chrysaetos) (BLMSS)

Ferruginous hawk (Buteo regalis)

Prairie Falcon (Falco mexicanus)

Elf owl (Micrathene whitneyi) (State endangered)

Burrowing owl (Speotyto cunicularia) (BLMSS)

Gila woodpecker (*Melanerpes uropygialis*) (State endangered)

Vermilion flycatcher (Pyrocephalus rubinus)

Southwestern willow flycatcher (*Empidonax traillii extimis*) (Federally endangered)

Bendire's Thrasher (Toxostoma bendirei)

Crissal Thrasher (Toxostoma crissale)

LeConte's Thrasher (Toxostoma lecontei)

Yellow warbler (Dendroica petechia)

Chuckwalla (Sauromalus obesus)

Mojave fringe-toed lizard (Uma scoparia) (BLMSS)

Desert rosy boa (Lichanura trivirgata)

Agassiz's desert tortoise (*Gopherus agassizii*) (Federally threatened)

Couch's spadefoot toad (Scaphiopus couchi) (BLMSS)

Management Action: Implement the recommended management actions from the most current version of the Recovery Action Plan for the Mojave Desert Tortoise (California Mojave Recovery Implementation Team). The management actions would be those that apply to the Chuckwalla Critical Habitat Unit.

Management Action: Develop a desert tortoise habitat linkage management and monitoring plan. The plan would include an inventory of potential obstructions to connectivity and sources of mortality within the ACEC, and a list of specific actions under the jurisdiction of BLM that may be needed to remove or mitigate impediments to desert tortoise occupancy and movement, and minimize the risk of fatalities (e.g., construction of fences and culverts along Kaiser Road, repair of culverts under Kaiser Mountain Railroad, etc.).

Management Action: Limit cumulative surface disturbance to one percent. Within the boundaries of the former Chuckwalla Bench ACEC, cumulative surface disturbance would be limited to 0.25 percent.

Management Action: Compensation for surface disturbance would be required at a 5:1 ratio. All compensation would be directed to the proposed Chuckwalla NLCS unit.

Management Action: Areas are designated as "washes closed zones" wherein vehicle use would be restricted to specific routes, including navigable washes, that are individually designated "open" or "limited".

Management Action: Place signs, kiosks and interpretive information at key recreational sites to better inform the public

Management Action: Stopping, parking, and vehicle camping are allowed no more than 100 feet from the centerline of an approved route of travel. Where wilderness areas would be closer to an approved route than the indicated standard, stopping, parking, and vehicle camping are allowed only to the boundary.

Management Action: Establish cooperative regional weed management area.

**Objective 1**: Protect biodiversity and manage for resilience (protect climate refugia and provide for migration corridors).

Management Action 1: Prioritize habitat enhancement in areas expected to provide for the greatest level of resiliency (good response or rehabilitation results after significant disturbance such as fire) and or resistance to change (e.g. climate refugia).

Management Action 2: Consider actions that enhance the primary productivity of climate refugia with native species restoration, reduced soil surface disturbance, and habitat infrastructure to increase carrying capacity of refugia (e.g., wetland, oasis).

Management Action 3: Maintain migration corridor integrity by minimizing obstructions (fences, roads), disturbances (limiting access to water and shade during peak temperatures) and habitat fragmentation.

**Objective 2**: Maintain and or enhance key ecosystem processes (e.g., carbon sequestration, water residence time) and prepare and respond to significant disturbances to the environment (e.g. floods).

Management Action 1: Develop proactive and responsive management actions for potentially dangerous and damaging disturbances to the environment, which are exacerbated by climate change (e.g. wildfire, flash floods, etc.).

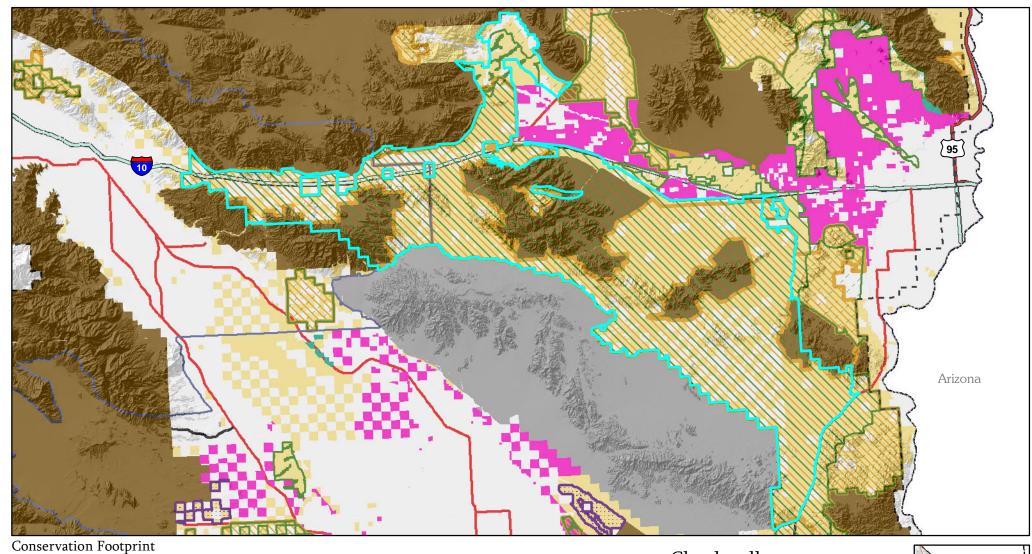
Management Action 2: Minimize carbon sequestration losses from management activities by reducing impacts to vegetation, soil structure and soil biota.

Management Action 3: Leverage disturbance events and other landscape changes, when possible, as opportunities to assess climate adaptation actions.

Climate Change & Adaptation

For example, revegetation objectives for projected climate scenarios benefiting multiple ecosystem services (habitat and carbon sequestration objectives).	
Objective: Because of the proximity to Joshua Tree National Park, the ACEC would be managed area as VRM Class II, with portions near Interstate 10 designated as VRM Class III	Visual Resources
Management Actions: Stopping, parking, and vehicle camping are allowed no more than 100 feet from the centerline of an approved route of travel. Where wilderness areas would be closer to an approved route than the indicated standard, stopping, parking, and vehicle camping are allowed only to the boundary.	Trails and Travel Management
Management Action: Areas are designated as "washes closed zones" wherein vehicle use would be restricted to specific routes, including navigable washes, that are individually designated "open" or "limited". Increase "washes closed zone" to include the entire boundary of the former Chuckwalla Bench ACEC.	
Objective: Provide dispersed opportunities focused on enjoyment of the NLCS/ACEC qualities.	Recreation
Portions of this NLCS/ACEC overlap with the Chuckwalla Special Recreation Management Area (SRMA) and associated Recreation Management Zones (RMZ) found within. Please refer to the SRMA summaries for the SRMA and RMZs for specific guidance on recreation management/goals.	
Objective: Manage portions of the Wiley Well district within North-Eastern Imperial County for rock hounding recreation activities. Allow recreational and educational use of the Hauser Geode Beds within the Wiley Well district by members of the public, including individuals and organized groups or clubs, while maintaining the health of the land.	
Management Actions: Develop and produce maps and brochures and make these available for members of the public. Coordinate with organized groups, clubs and associations to establish guidelines aiming at preventing resource damage in the area. Some of these guidelines may include periodic cleanups and trash removal, limiting off highway vehicle traffic to existing routes, developing routine maintenance of routes, site and facilities supporting visitors in the area.	
Objective: Consolidate through tenure adjustment.  Management Action 1: Acquire inholdings, edgeholdings and other interests from willing sellers.  Management Action 2: The Chuckwalla ACEC is a priority acquisition area for desert tortoise compensatory mitigation.	Land Tenure

Objective: Protect resource values of the ACEC Management Action 1: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.  Management Action 2: Within the designated Utility Corridor, the area is open for transmission ROW only (i.e., the integrity of the BLM Utility Corridor will be maintained).	Rights of Way (ROW)
Not an allowable use. Renewable energy development is not compatible with NLCS and ACEC unit values and criteria.  Geothermal: ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	Renewable Energy
Recommend withdrawal from locatable mineral entry within the boundaries of the former Chuckwalla Bench ACEC based on previous management plans. This is the area of highest density tortoise populations.	Locatable Minerals Mineral Materials Non-energy Leaseable
Closed to Salable Minerals within the boundaries of the former Chuckwalla Bench ACEC. In other areas, material sales would be allowed only in areas where impact to vegetation and wildlife would be negligible.	
No-surface occupancy leasable minerals.	



# Legislatively & Legally Protected Areas ACEC Boundaries Only Disturbance Cap Renewable Footprint Department of Defense Renewable Footprint Development Focus Areas National Conservation Lands DRECP Boundary Land Status Bureau of Land Management Department of Defense Development Focus Areas Variance Process Lands

**\_\_\_\_\_** Miles

# Chuckwalla

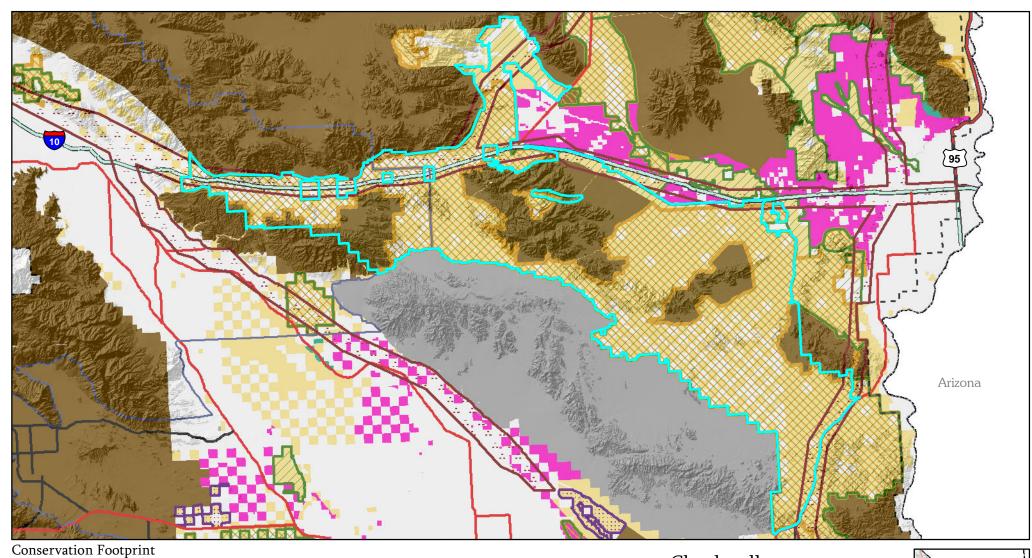
6/23/2015











# Conservation Footprint Legislatively & Legally Protected Areas National Conservation Lands Proposed ACEC Transmission Corridor OHV Boundary Renewable Footprint Development Focus Areas Variance Process Lands Variance Process Lands

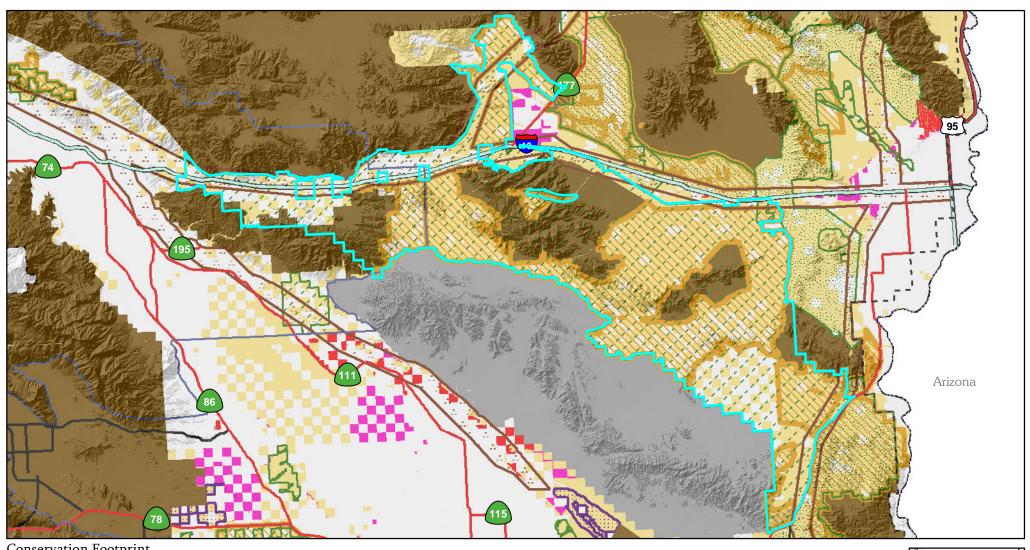
# Chuckwalla

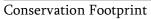














**ACEC Boundaries** 

0.1% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation

**\_** Miles

#### DRECP Boundary

CDCA Boundary Transmission Corridor

#### **OHV** Boundary Renewable Footprint

Development Focus Areas Variance Lands

#### Land Status

Bureau of Land Management

Department of Defense

# Chuckwalla

Alternative 1

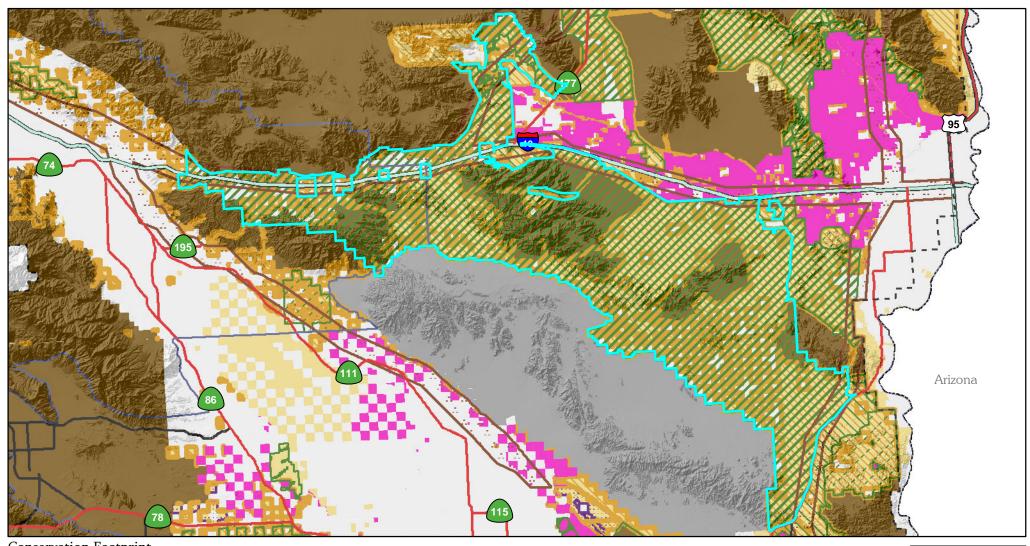
8/25/2015

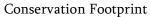












Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

# DRECP Boundary Land Status DRECP Boundary Bureau of Land Management Department of Defense OHV Boundary Renewable Footprint Development Focus Areas

Miles

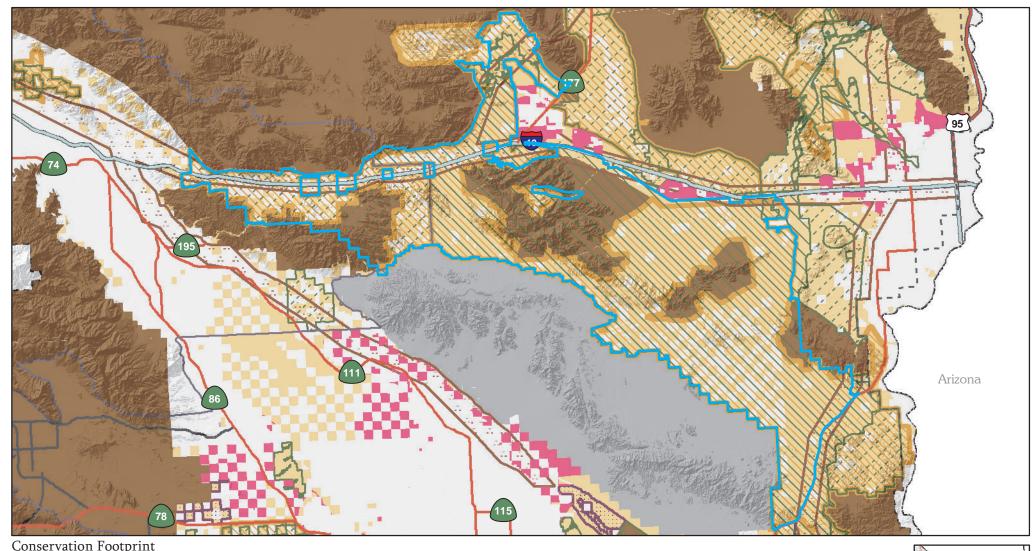
## Chuckwalla Alternative 2

8/26/2015

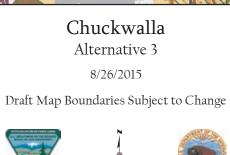








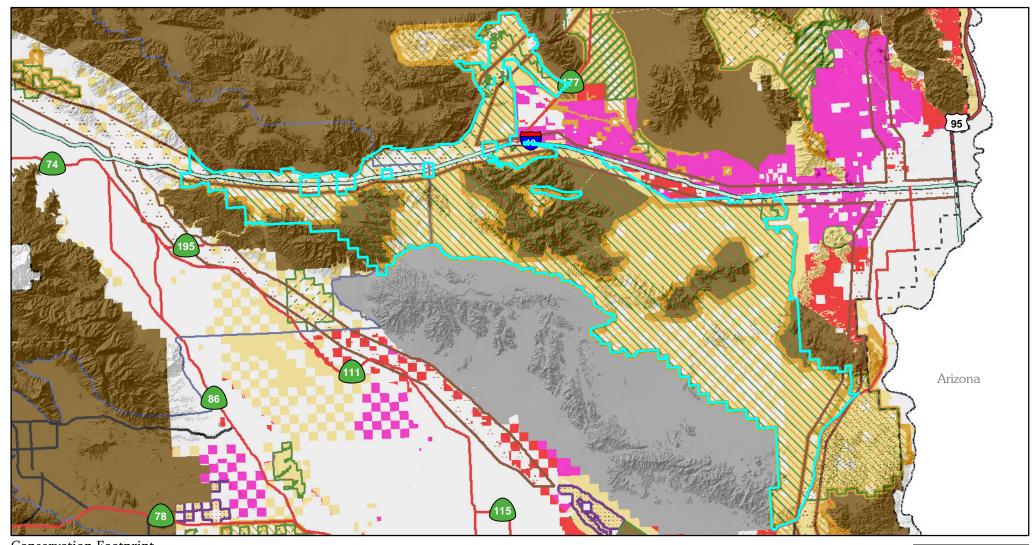
#### Conservation Footprint Legislatively & Legally Protected Areas DRECP Boundary Land Status CDCA Boundary National Conservation Lands Bureau of Land Management **ACEC Boundaries** Transmission Corridor Department of Defense OHV Boundary 0.1% Disturbance Cap Renewable Footprint 0.5% Disturbance Cap 1% Disturbance Cap Development Focus Areas 16

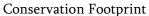












Legislatively & Legally Protected Areas
ACEC Boundaries

0.1% Disturbance Cap

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation



DRECP Boundary

CDCA Boundary

OHV Boundary

Transmission Corridor

0 4 8

# Chuckwalla

Alternative 4

8/27/2015

Draft Map Boundaries Subject to Change









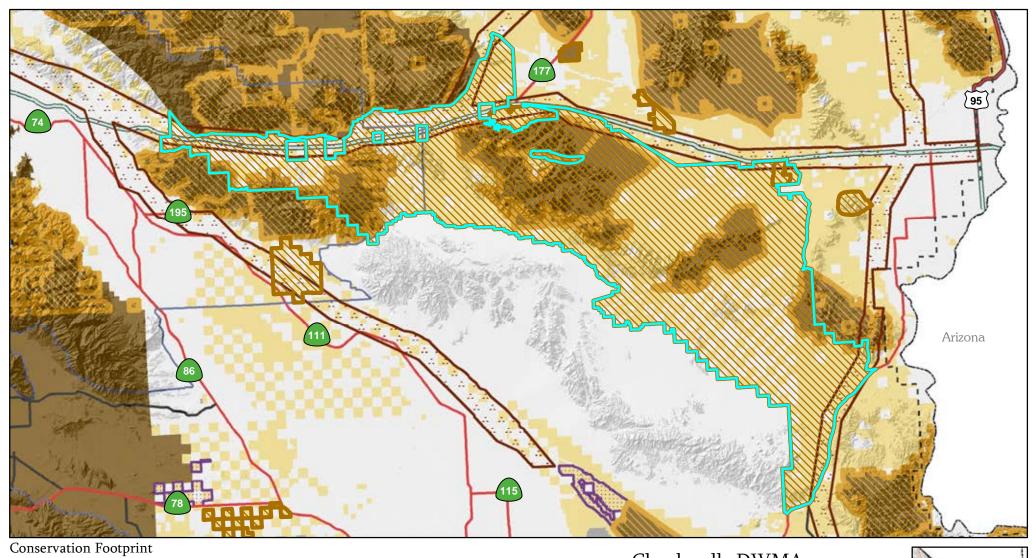
Development Focus Areas

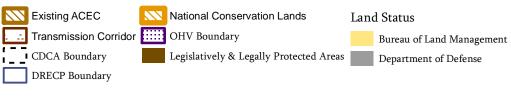
Bureau of Land Management

Department of Defense

Variance Lands

Land Status





# Chuckwalla DWMA No Action

9/15/2015

Draft Map Boundaries Subject to Change









\_\_\_\_\_Miles

## **Chuckwalla-Chemehuevi Tortoise Linkage**

**National Conservation Lands Ecoregions:** Colorado Desert, Pinot Lucerne Valley and Eastern Slopes, Piute Valley and Sacramento Mountains

### **Description / Location:**

The proposed Chuckwalla-Chemehuevi Tortoise Linkage lands would encompass an area of approximately 289,000 acres, the majority of which is BLM land. The area is bordered on the north by the Chemehuevi ACEC, on the south by several BLM wilderness areas, and on the west by Joshua Tree National Park. Portions of this area are currently managed as the Rice Valley Multi-species Wildlife Habitat Management Area (WHMA) and as multiple Bighorn Sheep WHMAs under the Northern and Eastern Colorado Desert Coordinated Management Plan. The Iron Mountain Divisional Camp ACEC, Granite Divisional Camp, and the Rice Airfield are also within this area.

### **Nationally Significant Values:**

Ecological Values: The proposed NLCS lands would protect an area of highest value desert tortoise habitat in northeastern Riverside County (2009 USGS Desert Tortoise Habitat model). It would provide critical desert tortoise habitat connectivity between the two major desert tortoise populations identified in the Colorado Desert (i.e., the Chuckwalla and Chemehuevi critical habitat units) and Joshua Tree National Park. The area contains several bighorn sheep demes and corridors (demes in the Granite, Palen, Coxcomb and Iron mountains). The area also contains the Rice Valley dunes and sand transport corridor and core habitat for the Mojave fringe-toed lizard, a BLM Sensitive Species and a California Department of Fish and Game Species of Special Concern. Townsend's Big-eared Bat, a candidate as a California threatened species, inhabits several prominent abandoned mines inside this unit. Other BLM Sensitive Animal Species include California Leaf-nosed Bat ,Cave Myotis, Burrowing Owl, and Crissal Thrasher. One BLM Sensitive Plant is present: Harwood's Eriastrum (*Eriastrum harwoodii*). The proposed NLCS unit would also contribute to the overall linking of five currently isolated Wilderness Areas of northeastern Riverside County (i.e., Palen-McCoy, Big Maria Mountains, Little Maria Mountains, Riverside Mountains, and Rice Valley) with each other and Joshua Tree National Park, and would protect a large, intact representation of the Colorado Desert.

**Cultural Values:** This vast area also contains three Desert Training Center Divisional (DTC) Camps (Camp Iron Mountain, Camp Granite, and Camp Coxcomb), one of which is an existing ACEC (Camp Iron Mountain). These DTC Camps were promoted designed and initiated by General George S. Patton Jr. in preparation for the training of troops for the North African Desert Campaign in 1942. The intensive and realistic desert environmental training that the soldiers received was credited for the winning of the campaign in North Africa and the eventual war against Nazi Germany in World War II. The proposed ACEC has important scenic value as it is the backdrop of Highway 62, a proposed scenic highway, and a regionally relevant visual corridor.

Scientific Values: This area is critical for the understanding of desert tortoise and other special status species, recovery of these species, and the importance of sand transport and other unique variables. Prehistoric archaeological values are unknown as little to no surveys have been performed to date, but the area has high potential for these resources. The area has outstanding opportunities for research and study of natural and cultural values. The Desert Training Center Camps and the associated historic archaeological sites hold key information attributable to the lives and experiences of over 1 million WW II soldiers who received training for the war effort. While much is known about the written history of the large-scale events and famous officers such as General Patton, very little is known about the "average GIs" and the challenging environment that they experienced.

**Special Designations/ Management Plan/ Date:** New proposal incorporates areas managed under Patton's Ironwood Mountain Division Camp ACEC (1980), Rice Valley Wildlife Habitat Management Area (WHMA) (NECO 2002)

### **Relevant and Significant Criteria:**

**Biological**: The area has high value desert tortoise habitat and provides critical desert tortoise habitat connectivity between the two major desert tortoise populations identified in the Colorado Desert (i.e., the Chuckwalla and Chemehuevi critical habitat units) and Joshua Tree National Park. The area contains several bighorn sheep populations and corridor connecting them. The area also contains the Rice Valley dunes and sand transport corridor and core habitat for the Mojave fringe-toed lizard, a BLM Sensitive Species and a California Department of Fish and Game Species of Special Concern. The proposed unit contributes to the overall linking of five currently isolated Wilderness Areas of northeastern Riverside County (i.e., Palen-McCoy, Big Maria Mountains, Little Maria Mountains, Riverside Mountains, and Rice Valley) with each other and Joshua Tree National Park.

**Cultural:** This vast area also contains three Desert Training Center Divisional (DTC) Camps (Camp Iron Mountain, Camp Granite, and Camp Coxcomb), one of which is an existing ACEC (Camp Iron Mountain). These DTC Camps were promoted designed and initiated by General George S. Patton Jr. in preparation for the training of troops for the North African Desert Campaign in 1942. The intensive and realistic desert environmental training that the soldiers received was credited for the winning of the campaign in North Africa and the eventual war against Nazi Germany in World War II.

## **Goals and Objectives:**

- Maintain desert tortoise habitat connectivity between the Chuckwalla and Chemehuevi ACECs and Critical Habitat Units.
- Bighorn Sheep management goals and objectives are described in Section 2.3.1 in the NECO Plan.
- Protect the cultural values of the three divisional camps and the overall cultural landscape of the Desert Training Center.
- Protect visual corridor along state highway 62.

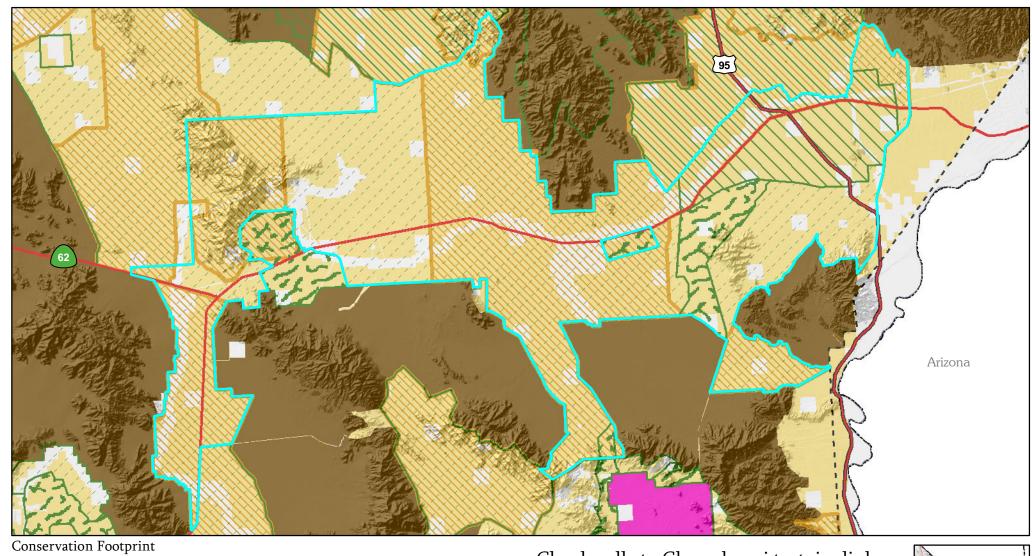
## **Designation and Acreage by Alternative:**

Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	0	0	NA
Preferred Alternative	152,553	319,944	0	0.1%, 0.5%, 1%
1	13,300	224,900	98,800	0.1%, 1%
2	224,900	224,900	98,800	0.25%
3	323,700	323,700	0	0.1%, 0.5%, 1%
4	34,300	130,500	98,700	0.1%, 0.5%, 1%

<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
Restrict construction activities when soils are susceptible to heightened risk of erosion. Limit ground-disturbing activities when soils are wet in order to avoid compaction of soils.	Soil, water, air
Comply with the State of California for all proposed actions that would contribute to particulate matter emissions.	
Objective: Prevent excessive ground water withdrawal that would potentially threatened dune/ playa dependent vegetation.  Action: Allow no activities that would create a water basin deficit/ decline.	
Protect special status vegetation. Maintain vegetation important to habitat for special status animal species.	Vegetation (incl. special status species)
OHV limited to designated routes. Limit surface disturbance to 1% with mitigation to protect resource values.	
Objective: Maintain desert tortoise habitat connectivity between the Chuckwalla and Chemehuevi ACEC and Critical Habitat Units.	Fish and Wildlife (incl. special status species)
Action: Develop a desert tortoise habitat linkage management and monitoring plan. The plan would include an inventory of potential obstructions to connectivity and sources of mortality within the ACEC, and a list of specific actions under the jurisdiction of BLM that may be needed to remove or mitigate impediments to desert tortoise occupancy and movement, and minimize the risk of fatalities (e.g., construction of fences and culverts along Highway 62, repair of culverts under railroads, etc.).	
Objective: Maintain the integrity of the sand transport system and sand sources. Control invasive species on the sand dunes/ Mojave fringe-toed lizard habitat.	
Protect BLM sensitive bat populations residing in abandoned mines, with special focus on Townsend's Big-eared Bat, a candidate for California state listing.	
Action: prevent or mitigate projects that would have the potential to impede sand transport or would impact sand source areas.	
Objective: Manage area as VRM Class III with portions near existing wilderness areas managed as Class II	Visual Resources
Allocation: OHV use limited to designated routes. There are no designated hiking trails at this time	Trails and Travel Management

Objective: Area would be managed within the Eastern Riverside Extensive Recreation Management Area (ERMA). Provide dispersed opportunities focused on enjoyment of the ACEC qualities.	Recreation
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure
Objective: Protect resource values of the ACEC Management Action 1: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.  Management Action 2: Lands with Wilderness Characteristics (LWC) within the ACEC would be ROW exclusion areas. Playas, dunes, and sensitive vegetation types outside of LWC would be exclusion areas for all types of ROWs except energy transmission.  Management Action 3: Where the ACEC overlaps the designated BLM Utility Corridor, the area is open for transmission ROW only (i.e., the integrity of the BLM Utility Corridor will be maintained), and avoidance for all other ROWs.  Not an allowable use. Renewable energy development is not compatible with NLCS and ACEC unit values and criteria.  Geothermal: ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	Rights of Way  Renewable Energy
Continue to allow mineral material disposals on a case by-case basis subject to site specific environmental analysis. Allow no disposal of mineral material in Lands with Wilderness Characteristics.	Locatable Minerals Mineral Materials Non-energy Leaseables
No-surface occupancy leasable minerals.	Tron energy reaseasies
Objective: Under existing RMP, the Rice Valley Allotment is available for sheep grazing. A portion of the ACEC would remain available for grazing.  Action: Fence Riparian Area	Livestock grazing
A part of this ACEC is within the Rice Valley grazing allotment. Grazing will continue to be authorized in the overlap area and is governed by federal regulations including the achievement of standards and guidelines.	
	1



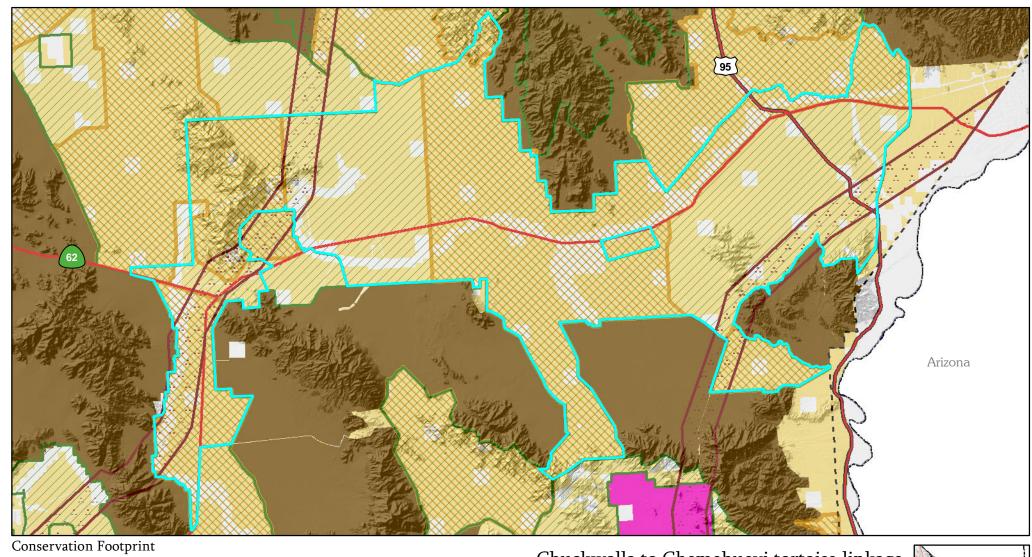
# Conservation Footprint Legislatively & Legally Protected Areas National Conservation Lands ACEC Boundaries Renewable Footprint O.1% Disturbance Cap Development Focus Areas Chuckwalla to Chemehuevi tortoise linkage Land Status Bureau of Land Management 6/23/2015 Draft Map Boundaries Subject to Change Draft Map Boundaries Subject to Change

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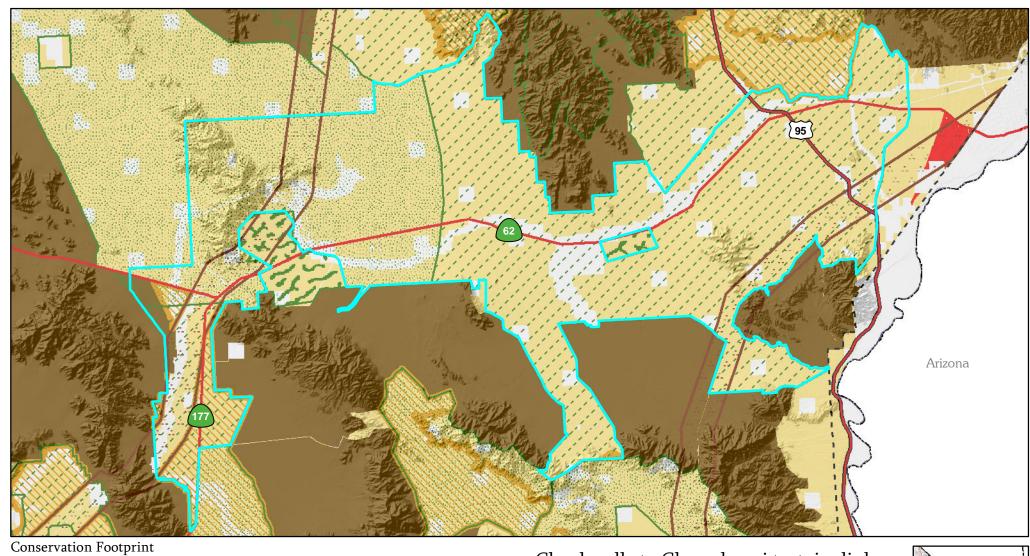


Development Focus Areas









Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation

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# DRECP Boundary

CDCA Boundary Transmission Corridor

Bureau of Land Management

Land Status

# Renewable Footprint

Variance Lands

## Chuckwalla to Chemehuevi tortoise linkage Alternative 1

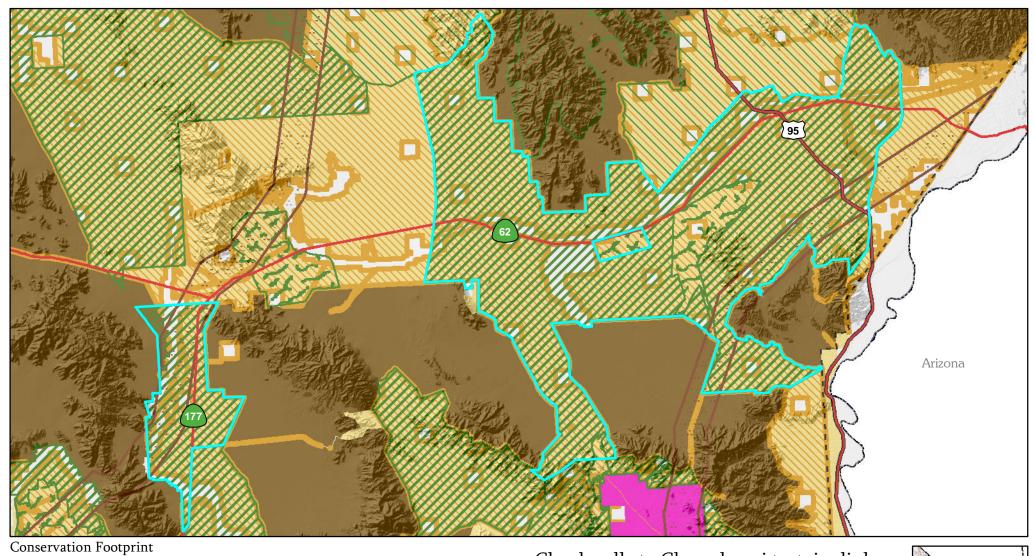
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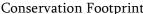












Legislatively & Legally Protected Areas

DRECP Boundary

Transmission Corridor

Development Focus Areas

CDCA Boundary

Renewable Footprint

Land Status

Bureau of Land Management

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

## Chuckwalla to Chemehuevi tortoise linkage Alternative 2

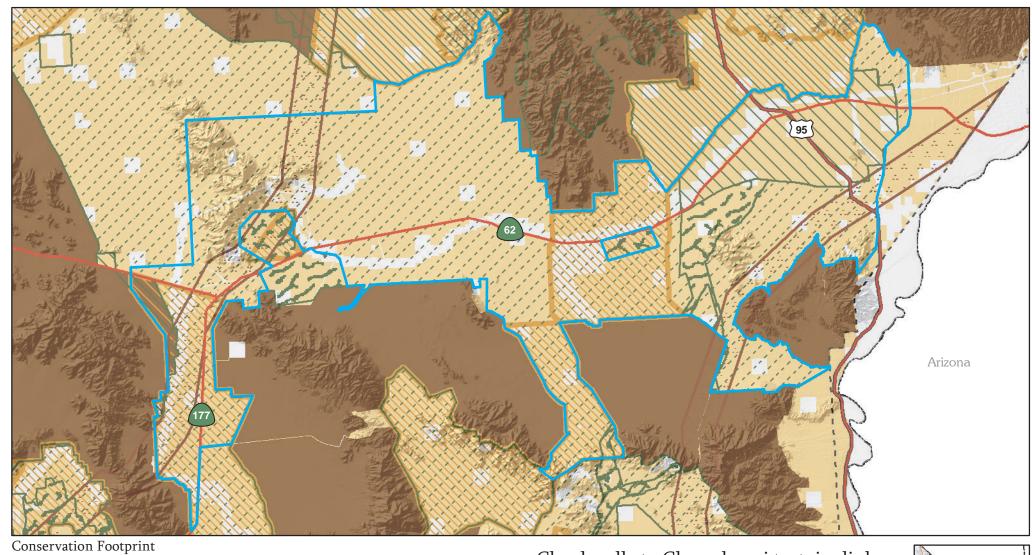
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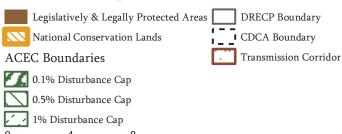












Miles

# Chuckwalla to Chemehuevi tortoise linkage Alternative 3

8/26/2015

Draft Map Boundaries Subject to Change



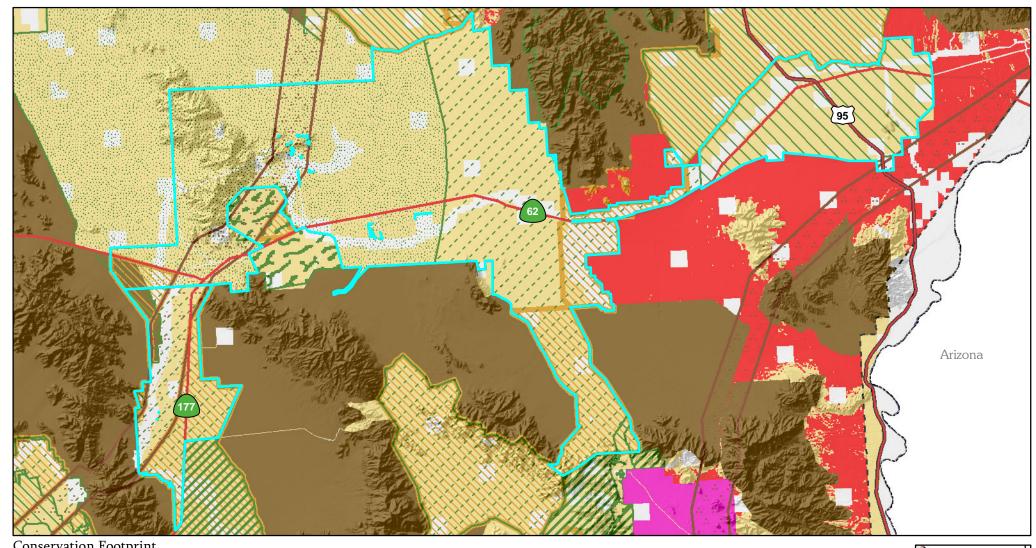


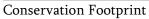




Land Status

Bureau of Land Management





**ACEC Boundaries** 

0.1% Disturbance Cap

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation

# Legislatively & Legally Protected Areas National Conservation Lands Renewable Footprint

DRECP Boundary

CDCA Boundary

Transmission Corridor

Development Focus Areas Variance Lands

Land Status

Bureau of Land Management

# Chuckwalla to Chemehuevi tortoise linkage

Alternative 4

8/27/2015









#### **Chuckwalla Dune Thicket**

National Conservation Lands Ecoregion: Colorado Desert

**Description/Location :** Eastern Riverside County, South of I-10, 18 miles West of Blythe within the Chuckwalla ACEC.

**Nationally Significant Values:** The existing Chuckwalla Valley Dune Thicket unit would be incorporated within the boundaries of the proposed Chuckwalla ACEC, and would contribute to the nationally significant values of that much larger unit.

#### Relevance and Importance Criteria:

**Biological:** The Chuckwalla Valley Dune Thicket is characterized by unusually dense pockets of palo verde woodland. The dense vegetation is the result of sand dunes damming several small washes and creating wetter soil conditions. It is noted for having the highest density winter bird populations in the California Desert. It is also noted for dense mammal and reptile populations. The diversity of habitats within this ACEC provides a unique mix of species in a very small area.

**Cultural:** The Dunes were a place where soft deep soils provided prehistoric Native Americans an advantageous area to inter cremated remains. Several cremation sites have been discovered along the Edison and Blythe Energy transmission line corridor in recent years. Disturbance of any Native American cremation sites raises serious Native American Graves Protection and Repatriation Act (NAGPRA) concerns and should be avoided. A major prehistoric trails network passed through the area and although the actual trails are no longer visible due to drifting sands, the remaining artifacts scattered along the trails are still present and may or may not be buried within the dunes. Surface-only cultural resource (Class III) surveys are unreliable as a determinant of presence or absence, as shifting sands and high wind events can change the visibility status on almost a daily basis. Any surveys performed in the past should be resurveyed here after any high wind event and before any planned disturbance.

**Scientific Values:** There is a high probability of buried and preserved archaeological sites in this area associated with trails, trade, and the transportation of prehistoric peoples throughout time from the Paleoindian period to protohistoric times. Little is known of the Archaic period and Paleoindian Period within the Chuckwalla Valley and surrounding area. Data and evidence that are contained here in the subsurface soils could provide substantial knowledge to the scientific and archaeological records.

Special Designations/Management Plan/Date: ACEC Plan No. 57, 06/08/1982

Overarching Goals: To protect wildlife resource values while providing for compatible public uses.

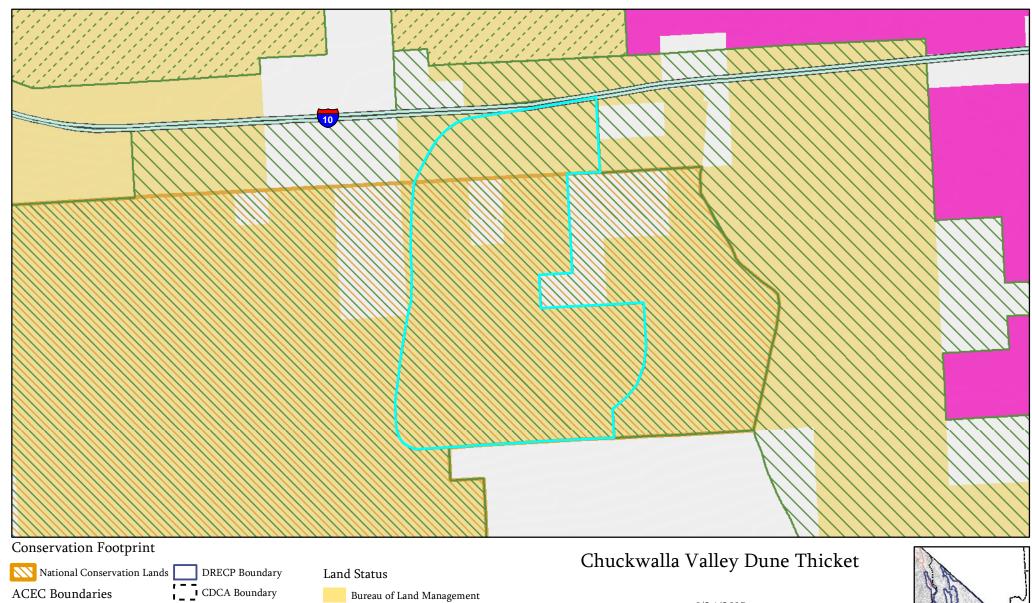
Designation	and A	creage	by	Alternative:
			1	

Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	2,200	0	1%
Preferred Alternative	1,799	2,200	0	0.5%
1	1,600	2,200	0	1%
2	2,200	2,200	0	0.5%
3	1,800	2,200	0	0.5%
4	1,600	2,200	0	0.5%

<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
Special Status Species:	Fish and Wildlife (incl.
Desert Tortoise	special status species)
Kit Fox	
Ferruginous Hawk	
Mojave Fringe Toed Lizard	
Burro Deer	
Objective: Enhance value of thicket for wildlife	
Action:	
Provide wildlife water source at thicket	
Designate drinker an official wildlife water source	
Objective: Encourage cavity nesting birds	
Action: Install nest boxes	
Objective: Prevent vehicle use from degrading habitat quality	
Action: Close dunes and immediate thicket area to vehicle use	
VRM Class II	Visual Resources
Allocation: OHV closed	Trails and Travel
	Management
There are no designated hiking trails within this ACEC at this time	
Allocation: OHV closed	Recreation
Objective: Increase coordination with CDF&G in management and patrol of	
ACEC	

Action: Enter into cooperative agreement with CDF&G Objective: Control unauthorized and illegal use within ACEC Action: Increase BLM patrols  Allow for primitive, low-impact dispersed recreation (hiking, wildlife watching, etc.) opportunities that do not conflict with wildlife conservation measures	
Objective: Consolidate through tenure adjustment.*  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.  *largest threat to area is development of surrounding private lands, therefore increasing access and visibility to the dunes	Land Tenure
Objective: Protect resource values of the ACEC Management Action: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.	Rights of Way
Closed to renewable energy development  Geothermal: ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	Renewable Energy
Continue to allow mineral material disposals on a case by-case basis subject to site specific environmental analysis. Allow no disposal of mineral material in Lands with Wilderness Characteristics.  No-surface occupancy leasable minerals.	Locatable Minerals Mineral Materials Non-energy Leaseables





0.5% Disturbance Cap

1% Disturbance Cap

Renewable Footprint

Development Focus Areas

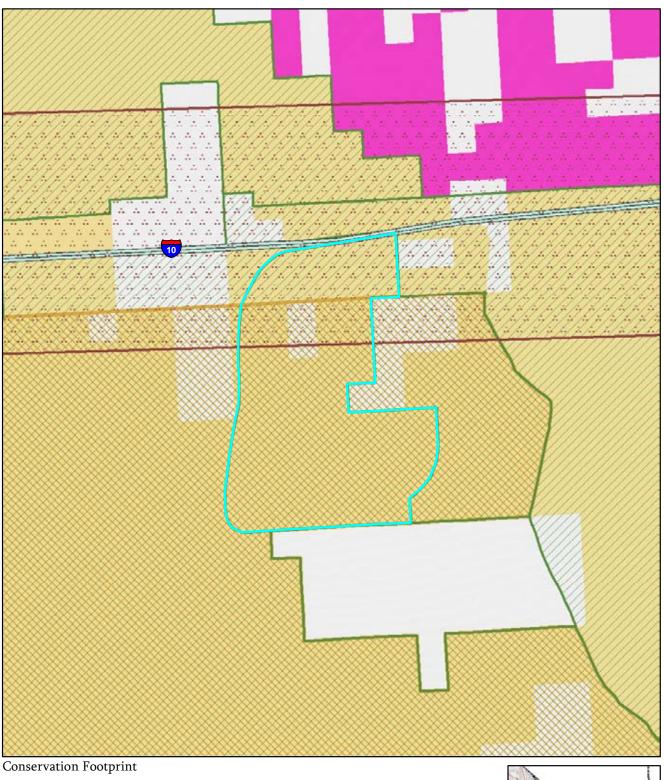
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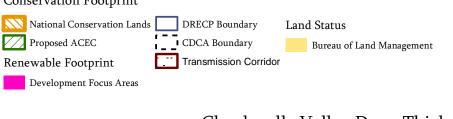












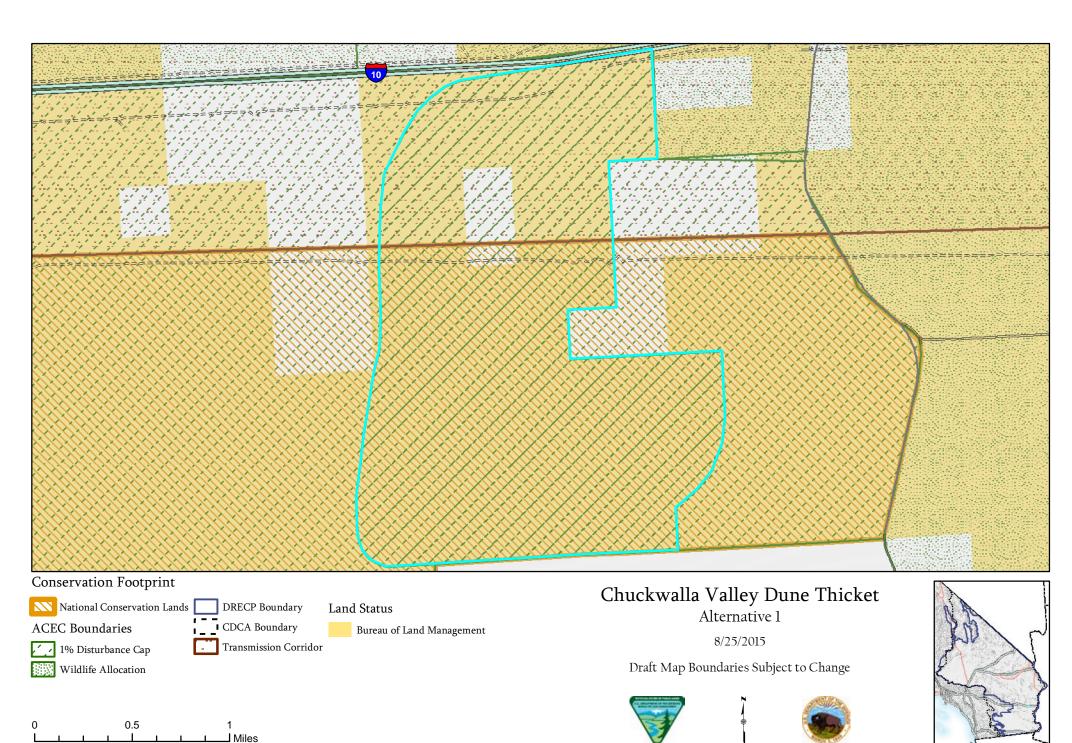
# Chuckwalla Valley Dune Thicket

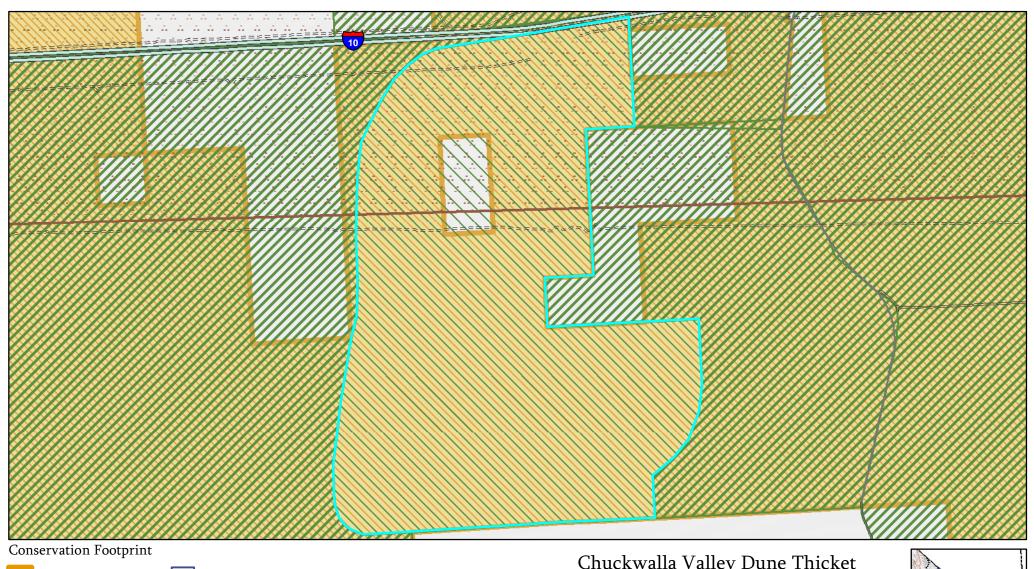


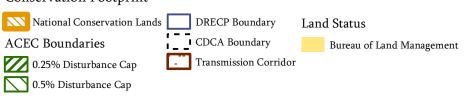
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0 0.5 1 L 1 1 1 1 Miles







# Chuckwalla Valley Dune Thicket

Alternative 2

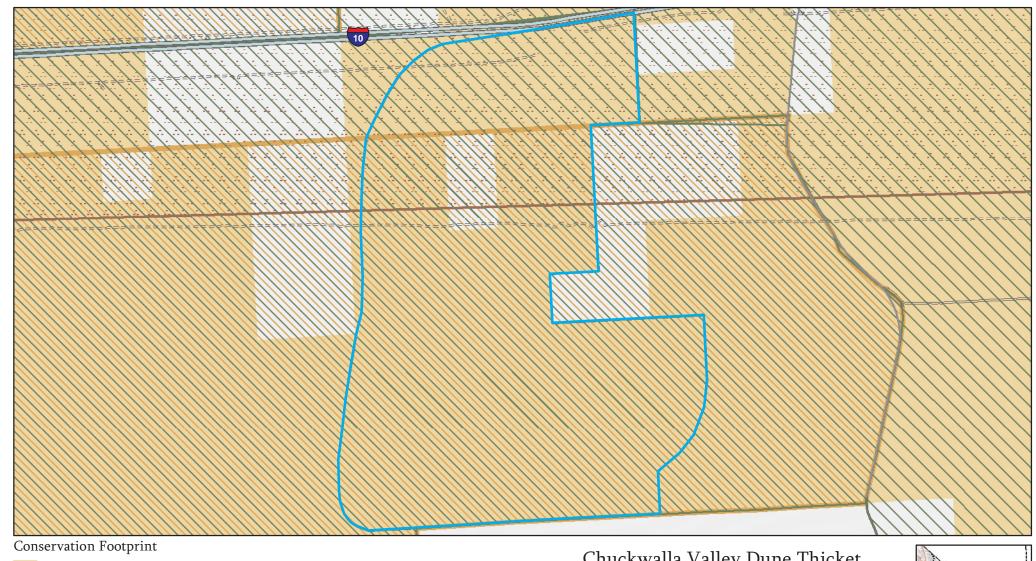
8/26/2015



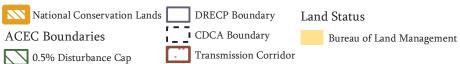












# Chuckwalla Valley Dune Thicket

Alternative 3

8/26/2015

Draft Map Boundaries Subject to Change

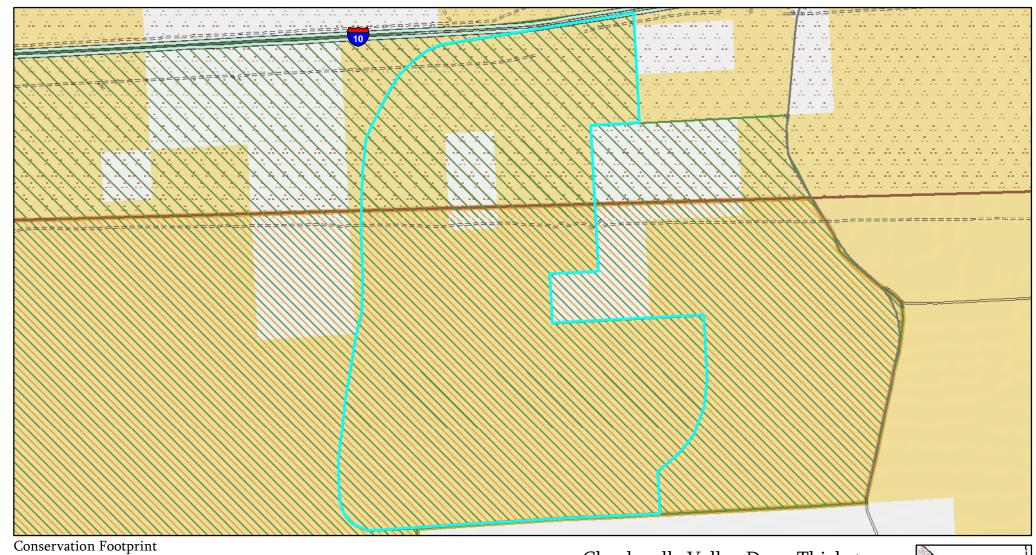


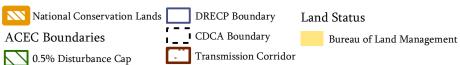






0.5 Miles





# Chuckwalla Valley Dune Thicket Alternative 4

8/27/2015

Draft Map Boundaries Subject to Change

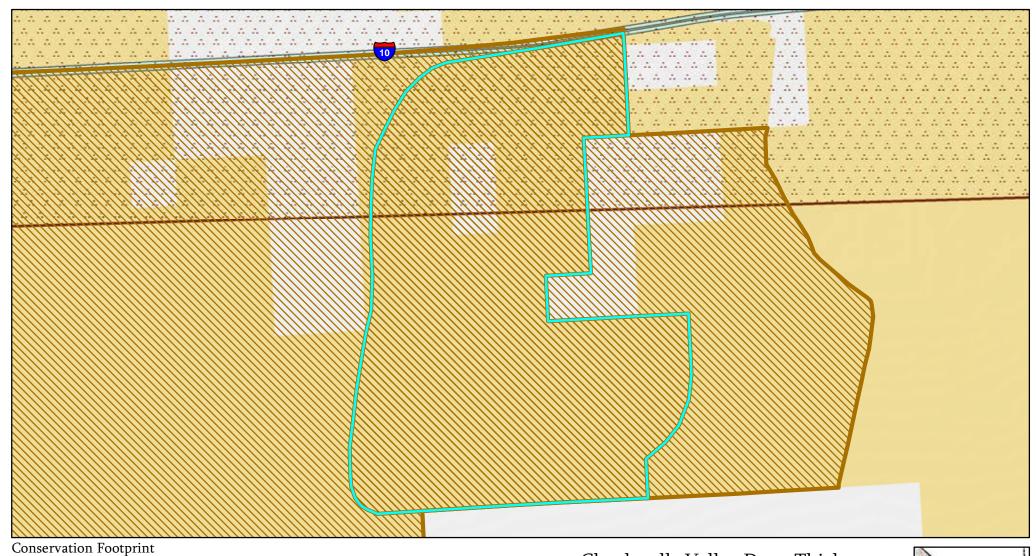


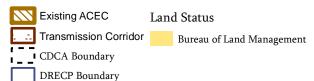






0 0.25 0.5





0 0.7 1.4 L J Miles

# Chuckwalla Valley Dune Thicket No Action

9/15/2015









## **Corn Springs**

National Conservation Lands Ecoregion: Colorado Desert

**Description/Location:** Seven miles south of Desert Center in eastern Riverside County. Western end of the Chuckwalla Mountains. Township 6S, Range 16 E. Accessible from I-10 by way of Corn Springs Road.

## **Nationally Significant Values:**

**Ecological Values:** Corn Springs is part of the larger Chuckwalla Mountains Sonoran/Colorado Desert ecosystem. The ACEC is surrounded by the Chuckwalla Mountains Wilderness. Corn Springs lies in a valley within the mountain range among spectacular steep walled canyons, washes, isolated rock outcrops, and vast desert expanses. The plant and wildlife species are diverse and include Desert bighorn sheep, burro deer, raptors, coyotes, fox, and Desert tortoise, as well as USFWS designated critical habitat for the desert tortoise. Ocotillo, yucca, creosote, and cholla, barrel, and foxtail cactus cover the landscape. Including this area as national conservation lands would connect it to a contiguous landscape linking several wilderness areas spanning two DRECP subareas from the Colorado River to the Mojave Desert. It would also be linked with other cultural ACECs at Alligator Rock, Mule Mountains, and as far south as Indian Pass.

**Cultural Values:** This ACEC features a series of Native American prehistoric trails including a major east to west trail, and a National Register of Historic Places (NRHP) listed prehistoric petroglyph site. The Petroglyph site is world renowned, highly visited by the public, and is featured on the BLM website. This area is surrounded by the Chuckwalla Mountains Wilderness Area and incorporates several historic mining sites. The Corn Springs petroglyph site and nearby campground are located deep in a canyon of the Chuckwalla Mountains, and is accentuated by a stand of more than 60 native California fan palms. This oasis supports abundant wildlife and is an important stopping place for Big Horn Sheep, deer and many migratory birds.

Corn Springs was a major occupation site of prehistoric Native American Indian groups and is aligned with a major east to west trail, leading from the coast to the interior southwest, and a National Register of Historic Places (NRHP) listed prehistoric petroglyph site. The petroglyphs at Corn Springs are one of the finest examples of rock art in the Colorado Desert. They display a wide variety of elements and cover a long time span, with the earliest petroglyphs dating back thousands of years. In addition to being a route for Native American Indians moving east and west, Corn Springs was used by the Chemehuevi Indians who moved into California about 1,100 A.D. These Native American Indians lived in harmony with the desert ecosystem, utilizing many of the native plant, animal, and mineral resources.

Many of the tributary canyons and washes have yet to be surveyed and newly discovered petroglyph sites continue to be discovered today. These side canyons host additional sources of water in the form of tanajas – natural rock basins which act as reservoirs and which retain pooled fresh rainwater after storms for an extended length of time These tanajas are commonly found in canyon floors of north-facing slopes, where the pools remain shaded until summer. Due to the ease of access with non-4-wheel drive motor vehicles, and the convenience of a nearby campground with available water, this site exemplifies the recreation values as archeo-tourism for southern California. Many of the petroglyph panels are handicapped accessible as they are easily seen from the road and from the interior of a car.

**Scientific Values:** The ACEC has exceptional scientific values related to the archaeological site and related adaptation of humans to the arid environment over thousands of years. The site is heavily visited and easily accessible, making it an outstanding location for research, study, and education.

Special Designations/Management Plan/Date: ACEC Plan No. 56 June 1981 2,454 Acres

Relevance and Importance Criteria: Relevant Cultural (Native American), Scenic, Hydrological, Recreational, and Wildlife and Vegetation values. A series of Native American prehistoric trails including a Classified as a Scenic Quality Class A, and a Visual Resource Management Class II. 480 acre Public Water Reserve No. 22. Wildlife and Vegetation extremely dependent on hydrological features. Heavily used by public for recreational purposes. A specifically high diversity of wildlife. Vegetation values include five rare plant species.

**Recreation Area:** This unit overlaps with the Chuckwalla SRMA.

**Overarching Goals:** To protect Native American, scenic, hydrological, recreational and wildlife and vegetation values while providing for compatible public uses

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

#### **Designation and Acreage by Alternative:**

Designation and	Acreage by Atternative.			
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	2,500	0	NA
Preferred Alternative	911	2,500	0	0.5%
1	1,000	2,500	0	1%
2	2,500	2,500	0	0.5%
3	900	2,500	0	0.5%
4	1,000	2,500	0	0.5%

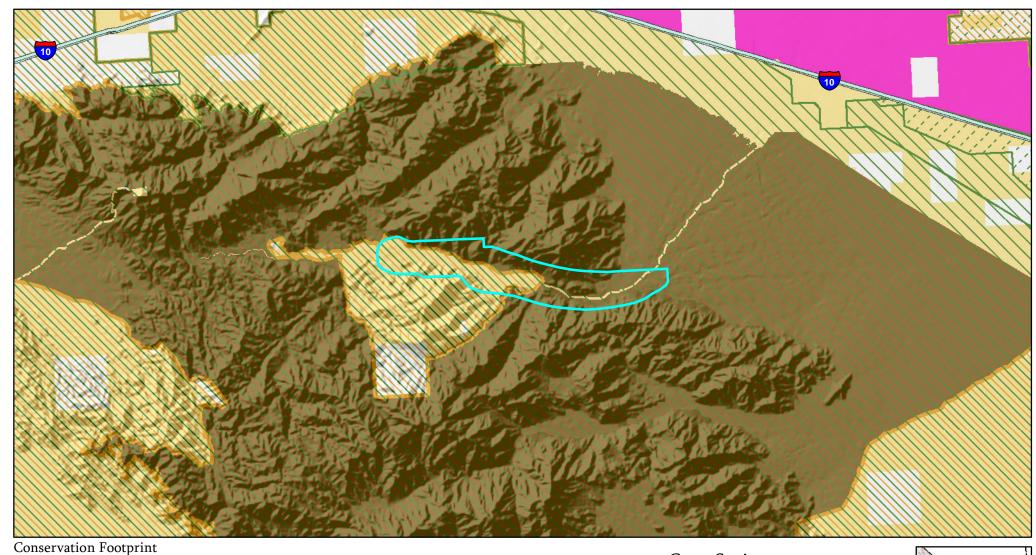
<sup>\*</sup> Acreage values are for BLM managed lands

This area is dual designated under this ACEC and under Chuckwalla ACEC. This will be removed from Chuckwalla but will remain designated here. The boundaries of the ACEC will be expanded to include all public lands surrounded by the Chuckwalla Mountains Wilderness (see map).

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
Public Water Reserve No. 22, 480 acres Objective: Determine causes of water level fluctuations at spring Action: Install shallow monitoring wells to record trends in water level fluctuations	Soil, water, air
Special Status Species: California Snake-bush Foxtail Cactus California Ditaxis Cove's Cassia Spearleaf	Vegetation (incl. special status species)
Objective: Protect Native Fan Palm Grove's continued existence. Action:  1. Remove invasive Tamarisk and Athel 2. Promote regeneration of California fan palm ( <i>Washingtonia filifera</i> ) to replace palms lost from drought and vandalism.	
Special Status Species: Bighorn Sheep Objective: Protect Palm Grove and resident wildlife Action: Remove all existing facilities from immediate grove area and create interpretive trail to explain changes to public Objective: Keep quail guzzler free of contaminants Action: Sign quail guzzler to inform public of purpose	Fish and Wildlife (incl. special status species)
Objective: Protect petroglyphs from vandalism Action: Install low barrier and interpretive panel in front of petroglyphs adjacent to road. Objective: Protect Corn Springs archaeological sites. Protect Prehistoric trail segments located along Corn Springs Road at entrance to canyon from vehicle and OHV use and damages. Action Item 1: Nominate Corn Springs to the National Register of Historic Places. Increased BLM presence and informational signage. Action Item 2: Prepare a plan to address any potential vandalism acts through current literature, and cooperation and communications with other federal agencies, and specialized consultants, dealing with the use of aerosol spray paint removal products and methods.	Cultural Resources
Objective: General Management of Cultural Resources Action Item 1: Ensure that management of cultural resources within the ACEC are consistent with agency responsibilities provided in Section 110 of the National Historic Preservation Act (NHPA). Action Item 2: Ensure that federal actions that may affect historic properties within the ACEC are properly reviewed and considered consistent with the requirements of Section 106 of the NHPA.	

Action Item 3: Ensure confidentiality of information about sensitive cultural resources consistent with Section 304 of the NHPA and Section 9 of the Archaeological Resources Protection Act. Objective: Establish Baseline Resource Information/Identify and Document **Cultural Resources** Action Item 1: Survey, identify and record new cultural resources within the ACEC boundaries. Action Item 2: Update records for existing cultural resources within the ACEC. Action Item 3: Integrate survey information into BLM cultural resources management systems (cultural GIS geodatabase) Action Item 4: Provide physical barriers to closed routes stemming from Corn Springs Road to deter OHV travel on non-designated routes, and along desert pavement areas where prehistoric trails are present. Objective: Identify Threats to Cultural Resources Action Item 1: Develop baseline assessment of specific natural and man-made threats to cultural resources in the ACEC (i.e., erosion, looting and vandalism, grazing, OHV). Objective: Monitoring/Protective Measures Action Item 1: Provide on-going monitoring for cultural resources based on the threat assessment. Action Item 2: Identify, develop or incorporate standard protection measures and best management practices to address threats. Action Item 3: Where specific threats are identified, implement protection measures consistent with agency Section 106 responsibilities. Action Item 4: Maintain current regularly scheduled site monitoring as administered through the California Archaeological Site Stewardship Program (CASSP) by the MOU with the Society for California Archaeology and the BLM. Objective: Interpretation/Public Awareness Action Item 1: Facilitate research, scientific study, and general study of cultural resources within the ACEC. Action Item 2: Where appropriate and with consideration of site protection and confidentiality, develop and provide interpretation to the public about cultural resources, including signs, interpretive panels, web-based information. Visual Resource Management Class II **Visual Resources** Scenic Quality Class A Objective: Keep public on roads in campground to protect palm grove and Trails and Travel Native American trails Management Action: Install rock barriers Allocation: OHV limited to designated routes. Maintain interpretive hiking trail within and near Corn Springs Campground

This ACEC falls within the Chuckwalla Special Recreation Management Area (SRMA). Please refer to the SRMA summary for more information on recreation goals/management	Recreation
Objective: Develop a specific group camp area to deter grove usage Action: Create/enhance group camp area Objective: Increase Bureau presence to decrease chances of vandalism and increase compliance with campground rules Action: Increase compliance with resource protections	
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure
Objective: Protect resource values of the ACEC Management Action: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.	Rights of Way
Closed to renewable energy development  Geothermal: ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	Renewable Energy
Open to locatable mineral entry Closed to mineral material sales Closed to leasable minerals	Locatable Minerals Mineral Materials Non-energy Leaseables



# Legislatively & Legally Protected Areas DRECP Boundary Land Status National Conservation Lands CDCA Boundary Bureau of Land Management ACEC Boundaries Renewable Footprint 0.5% Disturbance Cap Development Focus Areas

# Corn Springs

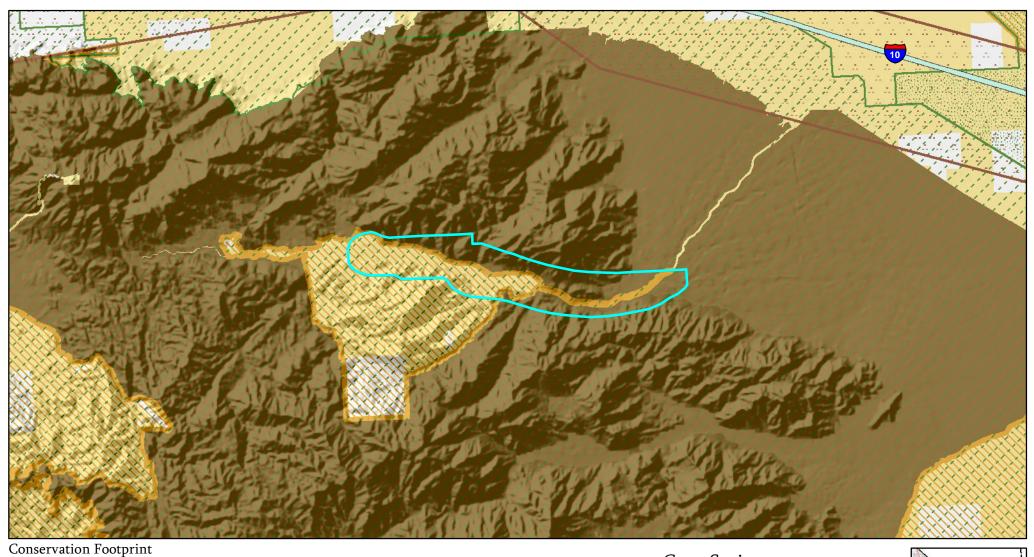
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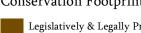












Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

1% Disturbance Cap

Wildlife Allocation

# Land Status

DRECP Boundary

CDCA Boundary

Bureau of Land Management Transmission Corridor

# Corn Springs Alternative 1

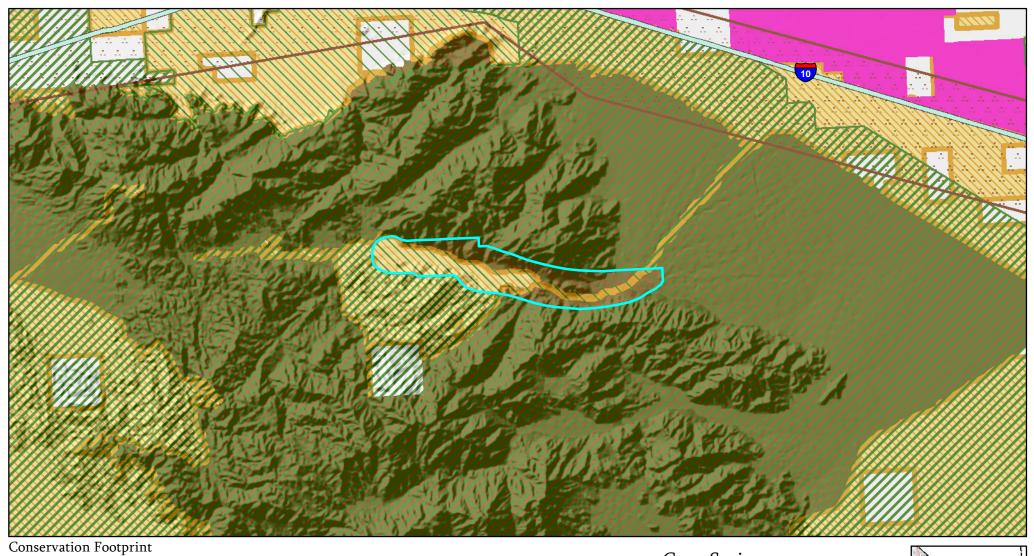
8/25/2015

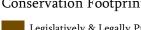












Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

Miles

# DRECP Boundary

CDCA Boundary

Transmission Corridor

Renewable Footprint

Development Focus Areas

## Land Status

Bureau of Land Management

## Corn Springs Alternative 2

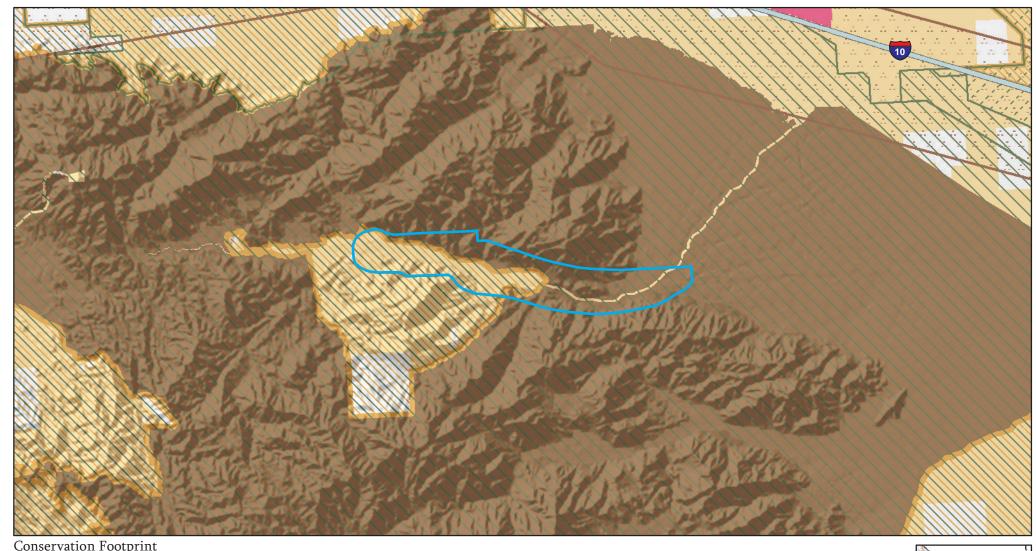
8/26/2015











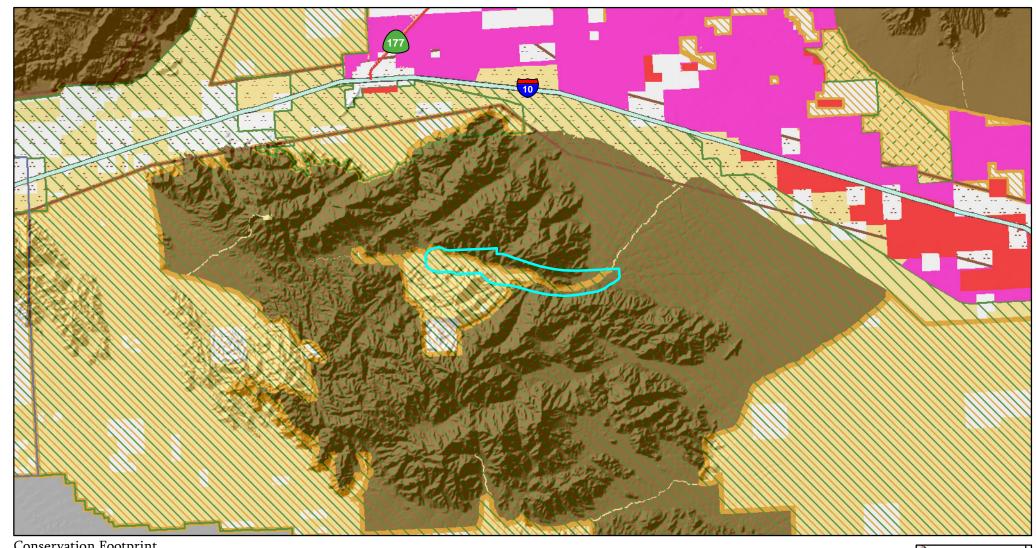
# Conservation Footprint Legislatively & Legally Protected Areas DRECP Boundary Land Status National Conservation Lands DRECP Boundary Bureau of Land Management ACEC Boundaries Transmission Corridor O.5% Disturbance Cap Renewable Footprint 1% Disturbance Cap Development Focus Areas

Corn Springs
Alternative 3
8/26/2015
Draft Map Boundaries Subject to Change









## Conservation Footprint



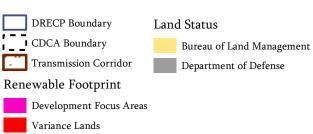
Legislatively & Legally Protected Areas CDCA Boundary

**ACEC Boundaries** 

0.5% Disturbance Cap

1% Disturbance Cap

LIIII Miles



## Corn Springs Alternative 4

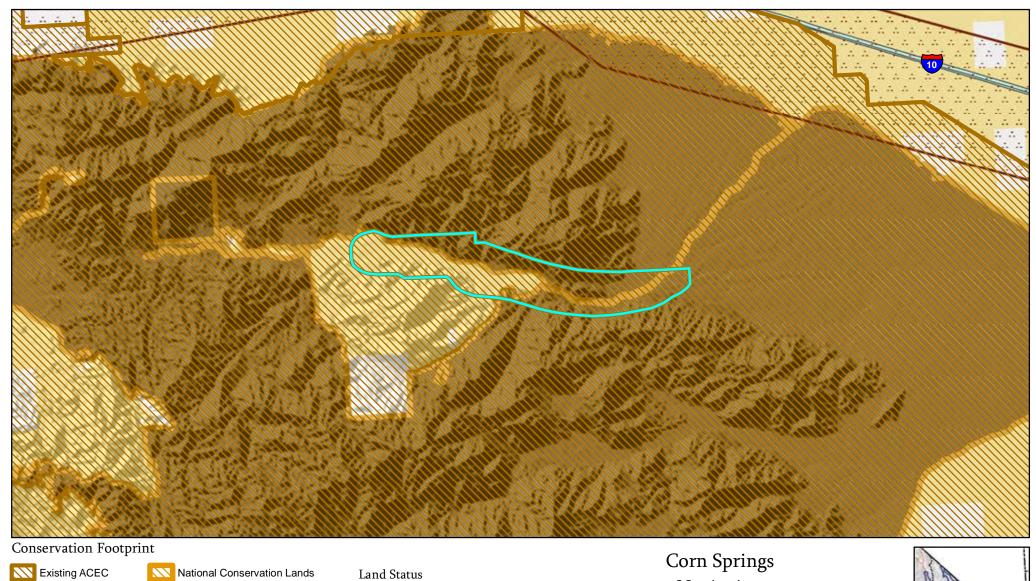
8/27/2015













Corn Springs No Action 9/15/2015

Draft Map Boundaries Subject to Change









Bureau of Land Management

283

### **Desert Lily Preserve**

National Conservation Lands Ecoregion: Colorado Desert

**Description/Location:** Approximately 7 miles north-northeast of Desert Center and adjacent to Hwy 177. The Desert Lily Preserve is at the end of the Coxcomb Mountains.

## **Nationally Significant Values:**

**Geological Values:** The Desert Lily Preserve is part of Pinto Wash, the west arm supplying sand to the large Palen shifting dune system, just as Pinto Wash passes below the south end of Joshua Tree Wilderness (part of Joshua Tree National Park).

**Ecological Values:** The Desert Lily Preserve is a nationally known viewing area for its abundant flora, particularly for its spectacular displays of desert lilies (*Hesperocallis undulata*) following winter rains. The area has long been protected, first receiving recognition as early as 1968 when the preserve was dedicated. The area was later dedicated an ACEC due to its flora. In 1994, the area received formal recognition from Congress and the President via the California Desert Protection Act in 1994 in which it became the Desert Lily Sanctuary and was withdrawn from all forms of entry. Two other BLM Sensitive Species are also present: chaparral sand-verbena (*Abronia villosa* var. *auritum*) and Harwood's eriastrum (*Eriastrum harwoodii*)

**Cultural Values:** Areas adjacent to washes are likely to support both surface and subterranean cultural resources. Vegetation communities present were, and remain, important to Native Americans for obtaining traditional natural resource materials. Shifting Sand dune features can alternatively reveal and conceal evidence of prehistoric human presence. Areas adjacent to the South have revealed evidence of human occupation along washes and some reports of human remains present as well. Archaeological surveys are lacking for this area so no detailed, precise information is available. Due to its proximity to major washes leading into Palen Dry Lake, it would be logical to assume that a significant concentration of prehistoric cultural resources are present.

Scientific Values: The Desert Lily Preserve has the potential to provide significant scientific and archaeological knowledge that has as yet to be gleaned. Situated alongside natural washed and near a dry lake bed, the presence of an intermittent source of fresh water would have been an attraction to prehistoric peoples in their quest for food, implements, and shelter resources. The ACEC incorporates a large microphyll woodland community, including a mesquite bosque, that would have provided numerous resources. Archaeological investigations could reveal evidence of past cultures and climate and environmental changes over the span of human occupation stretching out ten thousand years or more.

Special Designations/Management Plan/Date: ACEC Plan No. 94, 1994

**Relevance and Importance Criteria**: Relative vegetative values, including the desert lily within the ACEC boundaries. This particular area is known for its spectacular flora displays after the winter rains. Areas adjacent to washes are likely to support both surface and subterranean cultural resources. Vegetation communities present were, and remain, important to Native Americans for obtaining traditional natural resource materials.

**Overarching Goals:** Protect the areas vegetation from human impact while still providing for reasonable public use.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the

Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

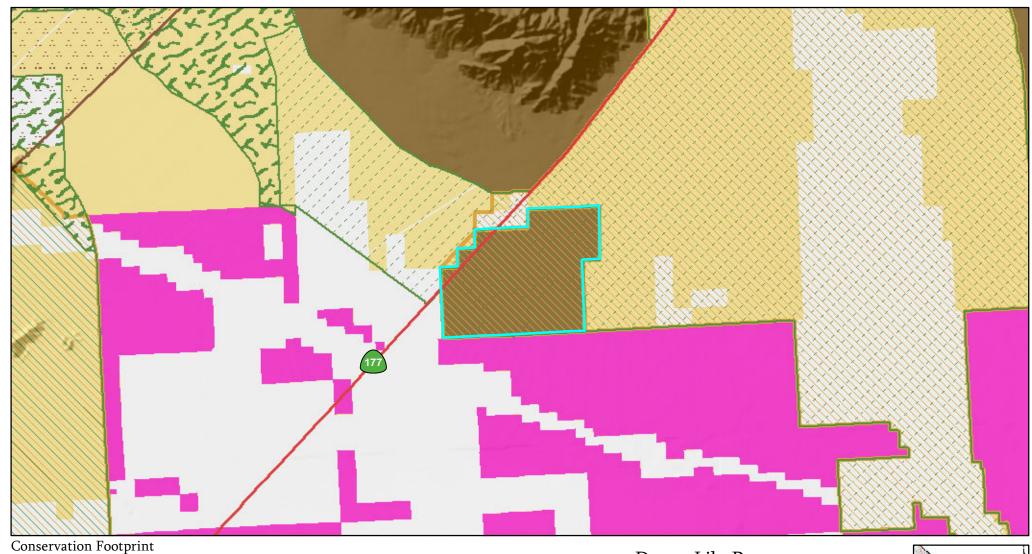
## **Designation and Acreage by Alternative:**

Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	2,100	0	NA
Preferred Alternative	2,051	2,100	0	1%
1	2,100	2,100	0	1%
2	2,100	2,100	0	1%
3	2,100	2,100	0	1%
4	2,100	2,100	0	1%

<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
Desert lily, microphyll woodland, including mesquite bosque	Vegetation (incl. special
Chaparral sand-verbena and Harwood's eriastrum	status species)
Objective: Protect desert lily and floral displays	
Action: Maintain 1975 fence on the east side of the preserve bordering	
highway 177	
Objective: protect Mojave fringe-toed lizard habitat and maintain the sand	Fish and Wildlife (incl.
transport system.	special status species)
Manage as VRM Class II	Visual Resources
Allocation: Closed to OHV. There are no hiking trails designated at this time.	Trails and Travel
	Management
Provide/maintain interpretive signs describing the biological values of the area.	Recreation
Allow for primitive, low-impact recreational opportunities (ie- hiking, wildlife	

watching) that are compatible with the conservation of the area	
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure
Objective: Protect resource values of the ACEC Management Action: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.	Rights of Way
Closed to renewable energy development.  ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	Renewable Energy
Withdrawal of all forms of appropriation including mineral entry as per Section 107 of the California Desert Protection Act.	Locatable Minerals Mineral Materials Non-energy Leaseables



# Conservation Footprint CDCA Boundary National Conservation Lands Land Status DRECP Boundary Transmission Corridor Bureau of Land Management ACEC Boundaries Renewable Footprint O.1% Disturbance Cap Development Focus Areas Legislatively & Legally Protected Areas

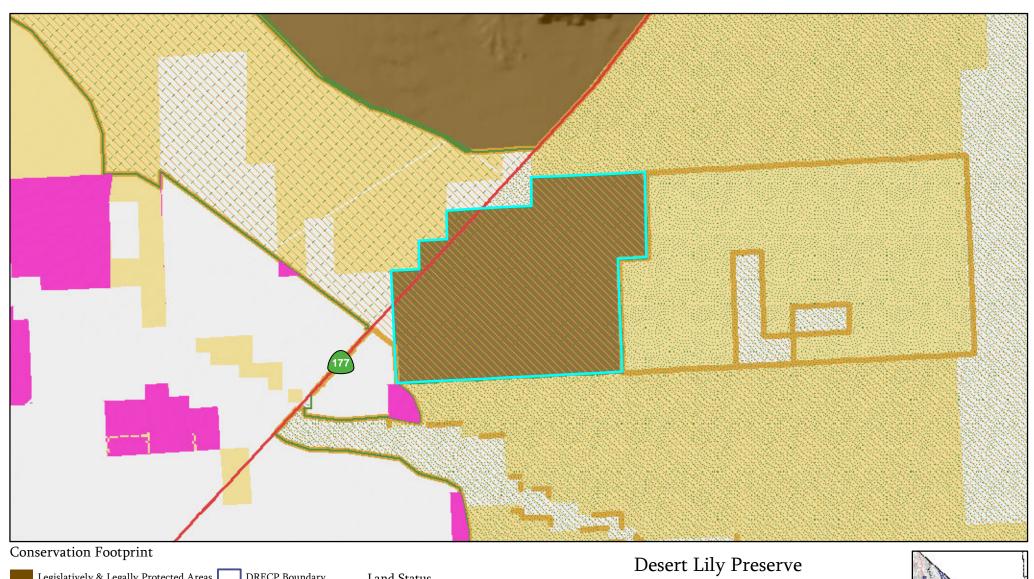
# Desert Lily Preserve

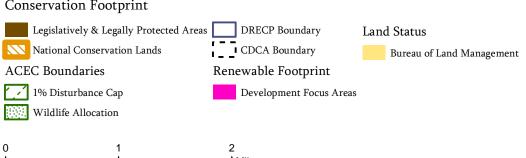












# Alternative 1

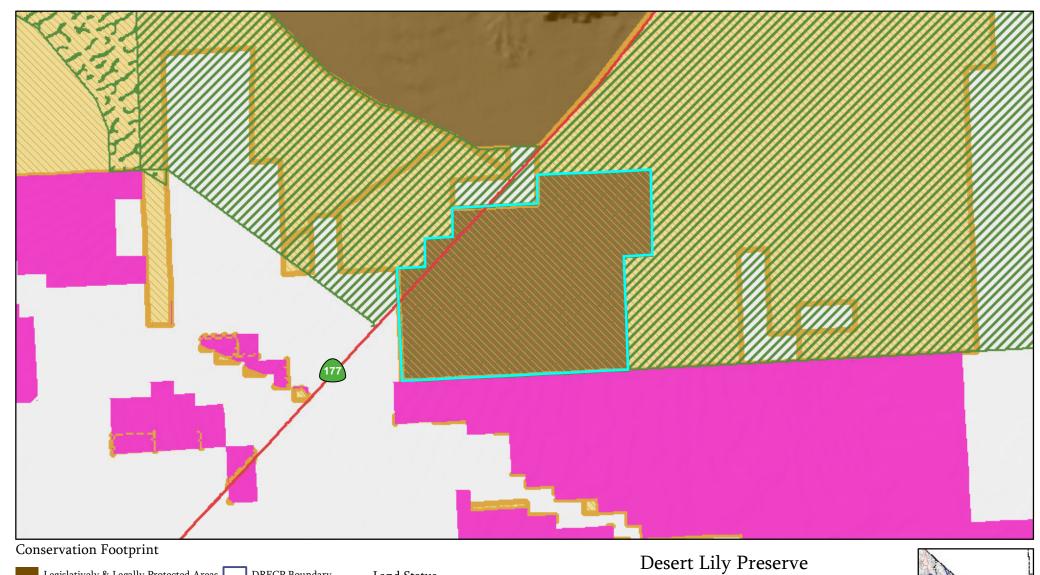
9/15/2015











# Legislatively & Legally Protected Areas DRECP Boundary Land Status National Conservation Lands CDCA Boundary Bureau of Land Management ACEC Boundaries Renewable Footprint 0.1% Disturbance Cap Development Focus Areas 1 DRECP Boundary Bureau of Land Management Development Focus Areas Miles

# Desert Lily Preserve Alternative 2

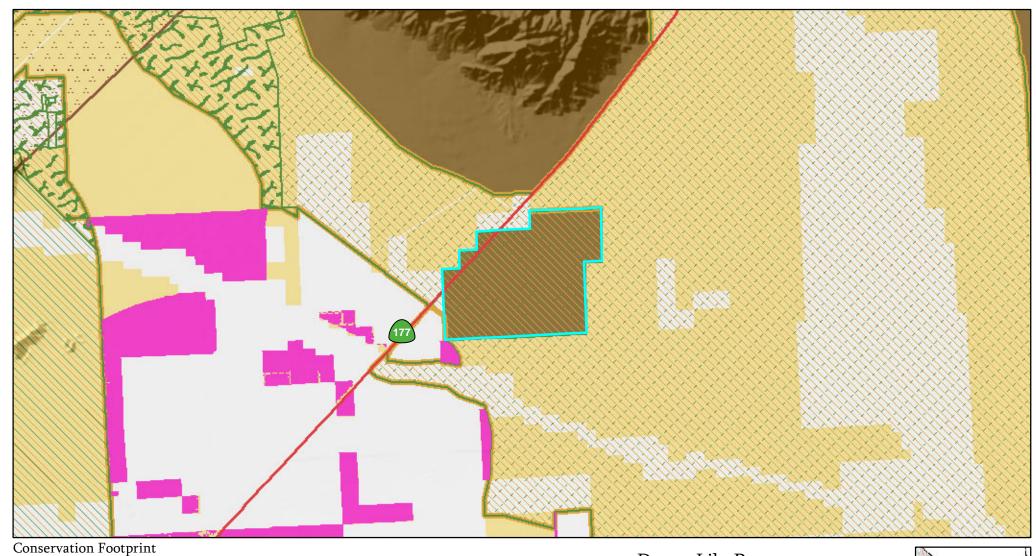
9/15/2015





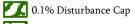






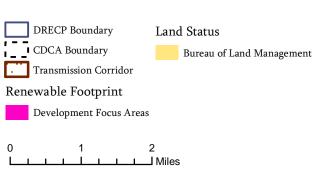


**ACEC Boundaries** 



0.5% Disturbance Cap

1% Disturbance Cap



# Desert Lily Preserve

Alternative 3

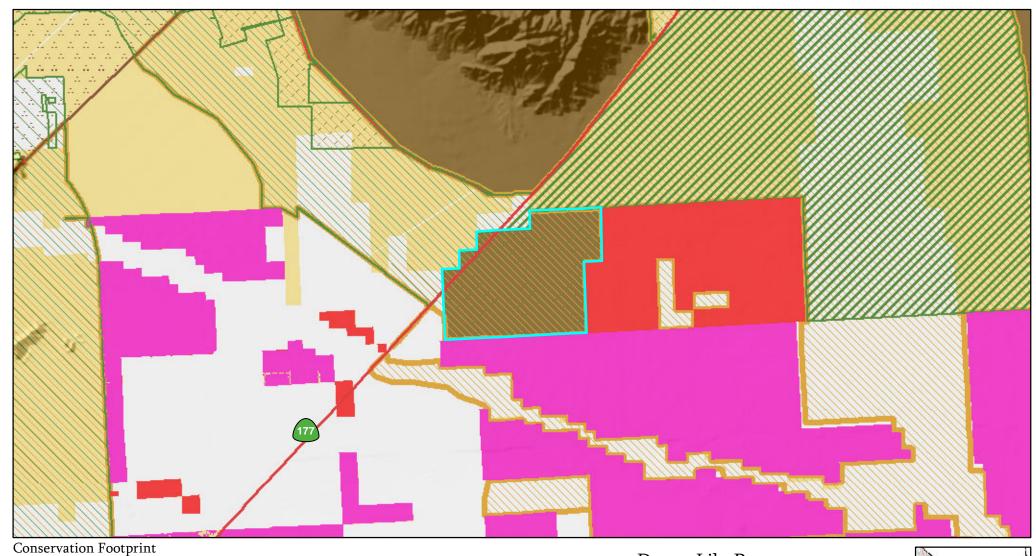
9/15/2015

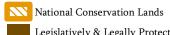










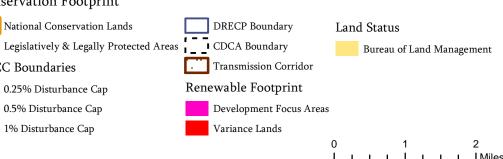


**ACEC Boundaries** 

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap



# Desert Lily Preserve

Alternative 4

9/15/2015













# Desert Lily Preserve No Action

9/15/2015

Draft Map Boundaries Subject to Change









0 1 2 L 1 1 Miles

### McCoy Valley

National Conservation Lands Ecoregion: Colorado Desert

### **Description/Location:**

The area is bordered on the north by the Palen-McCoy, Rice Valley, and Big Maria wilderness areas. Portions of the area are currently managed as the Big Maria Multi-species Wildlife Habitat Management Area (WHMA) and as multiple bighorn sheep WHMAs under the Northern and Eastern Colorado Desert Coordinated Management Plan

### **Nationally Significant Values:**

**Cultural**: There is an increased archaeological concern in this area for Historic WWII Desert Training Center activities. Archaeological sites are known throughout the valley between the mountain pediments. Prehistoric Trails are commonly located along the higher bajada and low mountain pediment interfaces. Native Americans would have gathered resources provided by the dispersed microphyll woodlands along the washes, and hunted lagomorphs, and camped along washes and mountain pediments.

**Scientific**: There is a significant scientific informational value to the desert washes and the microphyll woodlands within them, and the wildlife that is attracted to these niches. These areas may also provide scientific information on organic soil carbon sequestration management options. Cuts along the washes reveal stratigraphy of laid down under aeolian alluvial and pluvial actions for thousands of years. Evidence that can contribute to knowledge of environmental and climactic changes over time can be gleaned from these strata.

### **Special Designations/ Management Plan/ Date:**

Portions of the proposed ACEC are currently managed as Bighorn Sheep Wildlife Habitat Management Areas (WHMAs) (NECO 2002) and as a Multi-species WHMA (NECO 2002).

### **Relevant and Importance Criteria:**

The proposed ACEC would protect the upper bajadas and highly dissected alluvial fans along the base of the McCoy, Big Maria, and Little Maria mountains associated with the higher value desert tortoise habitat in the McCoy Valley. The McCoy Valley is proposed as one of the larger solar development areas in the California Desert. The ACEC would provide crucial desert tortoise habitat connectivity between the two major desert tortoise populations identified in the Colorado Desert (e.g., the Chuckwalla and Chemehuevi populations). The area contains bighorn sheep demes and corridors (demes and corridors in the Big and Little Maria mountains). Some areas within the ACEC provide a combination of meteorological, geological, hydrological, topographical features that have been identified as important climate refugia (slow/minimized climate changes) for wildlife species.

**Lands with Wilderness Characteristics:** This unit contains 3,083 acres of lands that would be managed to protect wilderness character under the preferred alternative. The CMAs for lands managed to protect wilderness character would also apply in those areas.

### **Overarching Goals:**

Maintain bighorn sheep demes and corridors. Bighorn Sheep management goals and objectives are described in Section 2.3.1 in the NECO Plan.

Maintain desert tortoise connectivity.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

### **Designation and Acreage by Alternative:**

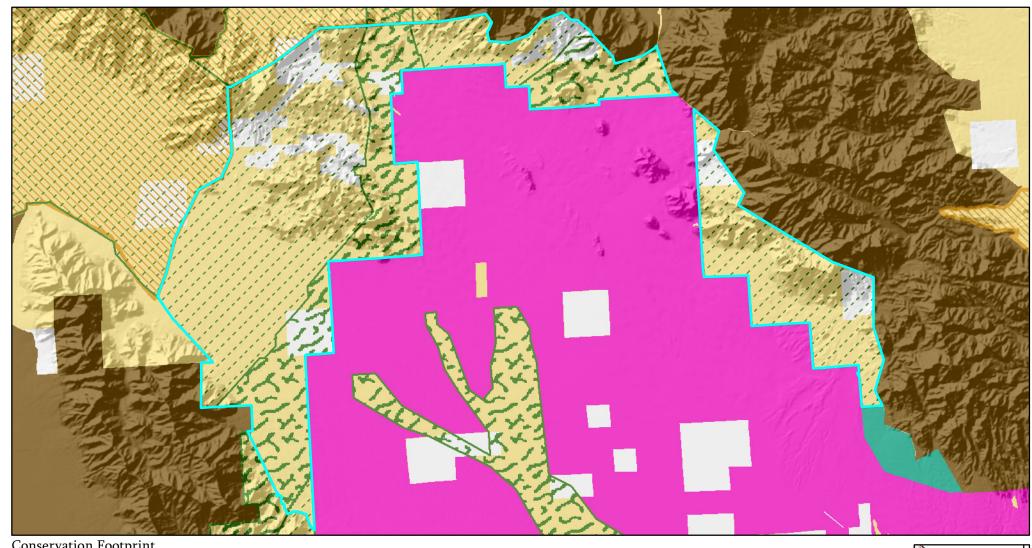
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	0	0	NA
Preferred Alternative	0	26,232	0	0.10%, 1%
1	12,400	0	55,200	Wildlife Allocation
2	26,200	26,200	0	0.10%, 0.25%
3	12,400	50,000	0	0.10%, 1%
4	6,500	18,900	0	0.10%, 0.25%

<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
<ul> <li>Management Actions:</li> <li>Restrict construction activities when soils are susceptible to heightened risk of erosion. Limit ground-disturbing activities when soils are wet in order to avoid compaction of soils.</li> <li>Comply with the State of California for all proposed actions that would contribute to particulate matter emissions.</li> </ul>	Soil, water, air
Objective: Prevent excessive ground water withdrawal that would potentially threatened dune/ playa dependent vegetation.	
Management Action: Allow no activities that would create a water basin deficit/ decline.	

Objective: Protect the higher value desert tortoise habitat associated with the upper bajadas and highly dissected fans surrounding the McCoy Valley.	Fish and Wildlife (incl. special status species)
Objective: Maintain bighorn sheep demes and corridors. Bighorn Sheep management goals and objectives are described in Section 2.3.1 in the NECO Plan.	
<b>Objective 1</b> : Protect biodiversity and manage for resilience (protect climate refugia and provide for migration corridors).	Climate Change and Adaptation
<ul> <li>Prioritize habitat enhancement in areas expected to provide for the greatest level of resiliency (good response or rehabilitation results after significant disturbance such as fire) and or resistance to change (e.g. climate refugia).</li> <li>Consider actions that enhance the primary productivity of climate refugia with native species restoration, reduced soil surface disturbance, and habitat infrastructure to increase carrying capacity of refugia (e.g., wetland, oasis).</li> </ul>	
<b>Objective 2</b> : Maintain and or enhance key ecosystem processes (e.g., carbon sequestration, water residence time) and prepare and respond to significant disturbances to the environment (e.g. floods).	
<ul> <li>Management Actions:</li> <li>Develop proactive and responsive management actions for potentially dangerous and damaging disturbances to the environment, which are exacerbated by climate change (e.g. wildfire, flash floods, etc.).</li> <li>Minimize carbon sequestration losses from management activities by reducing impacts to vegetation, soil structure and soil biota.</li> <li>Leverage disturbance events and other landscape changes, when possible, as opportunities to assess climate adaptation actions. For example, revegetation objectives for projected climate scenarios benefiting multiple ecosystem services (habitat and carbon sequestration objectives).</li> </ul>	
Objective: Manage area as VRM III	Visual Resources
Management Action: Restore all undesignated OHV routes to meet VRM class III objectives.	
Objective: Limit off-highway vehicle use to designated routes as per the local Travel Management plan	Trails and Travel Management
Management Item: Designated routes will be signed and managed in accordance to the local Travel Management Plan, as funding allows.	

Objective: Area would be managed within the Eastern Riverside Extensive Recreation Management Area (ERMA). Provide dispersed opportunities focused on enjoyment of the ACEC qualities.	Recreation
Portions of this ACEC overlap the Midland LTVA Special Recreation Management Area (SRMA). Please refer to the SRMA summary for details on recreation goals/management.	
Objective: Promote dispersed recreational activities in this area which would include (but is not limited to) Sight-seeing, camping, hunting, target shooting, hiking, and 4x4 touring.	
Objective: Encourage compliance with ACEC management recommendations  Management Actions:  Increase compliance and Bureau visibility in the area.	
Provide signage and maps to the public to inform them of route locations and regulations.	
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure
Objective: Protect resource values of the ACEC Management Action 1: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.  Management Action 2: Lands with Wilderness Characteristics are ROW exclusion areas.	Rights of Way
<ul> <li>Allocations:</li> <li>Closed to renewable energy production</li> <li>ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.</li> </ul>	Renewable Energy
Allocations:	Locatable Minerals
<ul> <li>Continue to allow mineral material disposals on a case by-case basis subject to site specific environmental analysis. Allow no disposal of mineral material in Lands with Wilderness Characteristics.</li> <li>No-surface occupancy leasable minerals.</li> </ul>	Mineral Materials Non-energy Leaseables



### Conservation Footprint

Legislatively & Legally Protected Areas CDCA Boundary

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

1% Disturbance Cap

——— Miles

### Land Status

DRECP Boundary

Renewable Footprint

Development Focus Areas

Variance Process Lands

Bureau of Land Management

# McCoy Valley

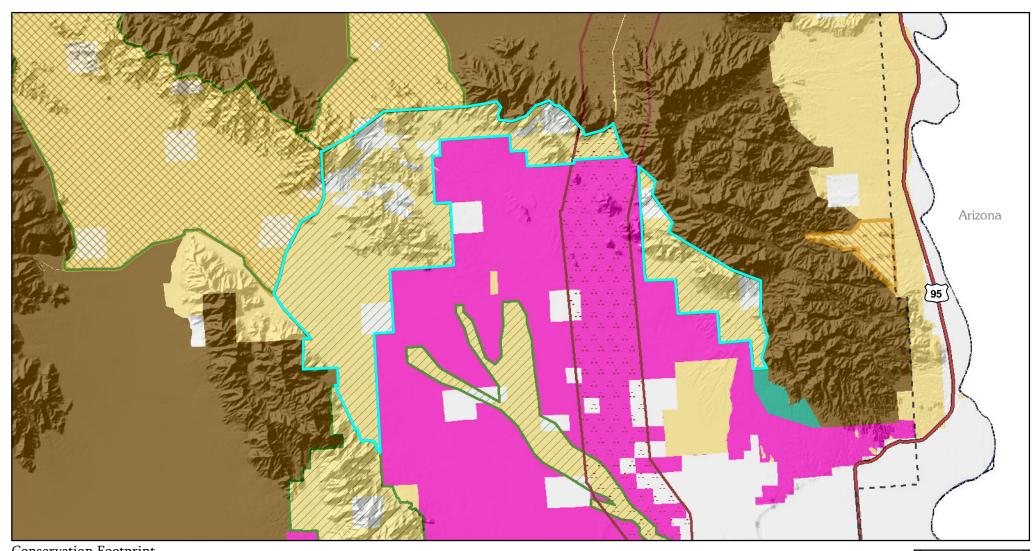
6/24/2015











# Conservation Footprint Legislatively & Legally Protected Areas DRECP Boundary Land Status National Conservation Lands Bureau of Land Management Proposed ACEC Transmission Corridor Renewable Footprint Development Focus Areas Variance Process Lands 0 2 4

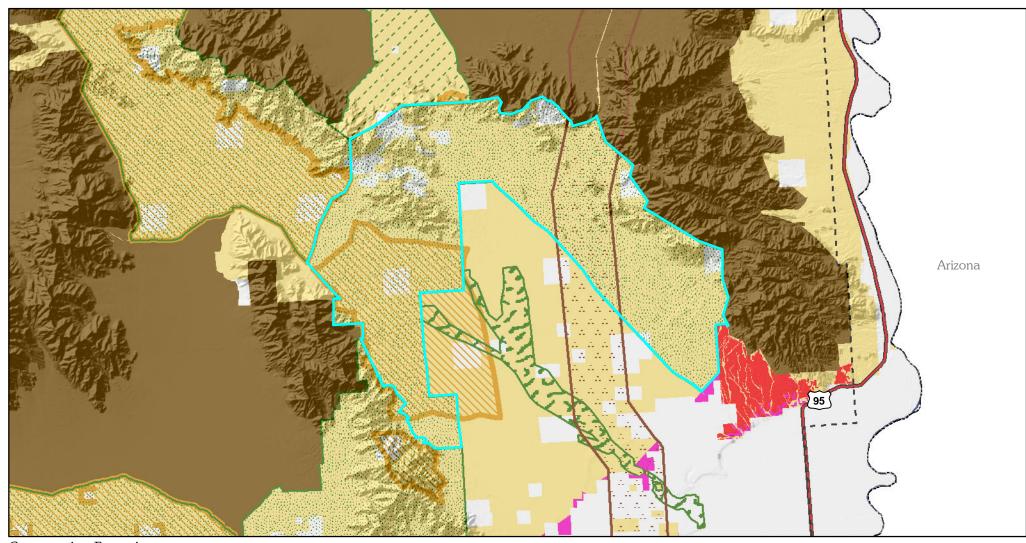
# McCoy Valley

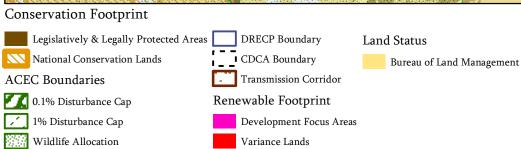












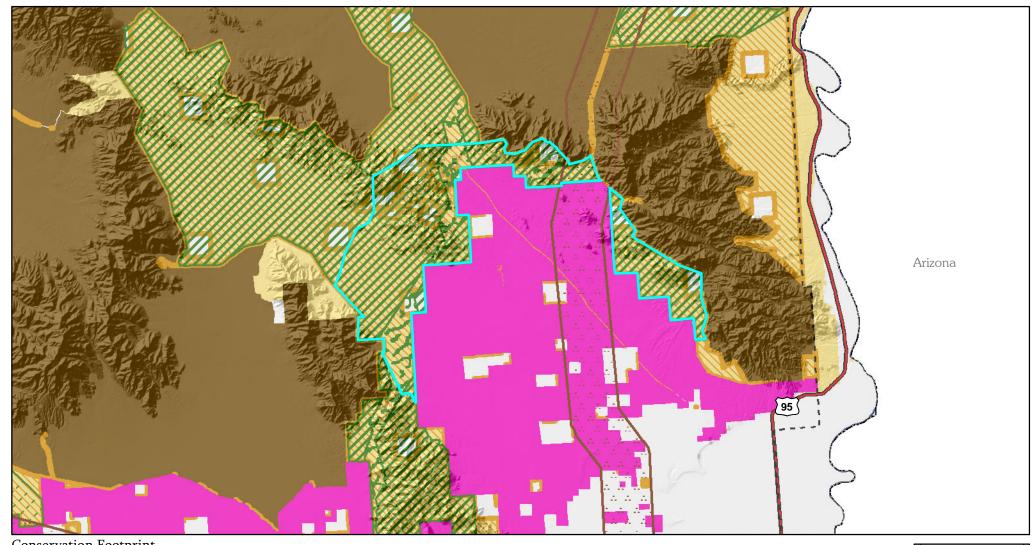
Miles L

McCoy Valley Alternative 1 8/25/2015









### Conservation Footprint

Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.25% Disturbance Cap

1% Disturbance Cap

Miles

## DRECP Boundary CDCA Boundary

Transmission Corridor

Renewable Footprint

Development Focus Areas

Land Status

Bureau of Land Management

# McCoy Valley

Alternative 2

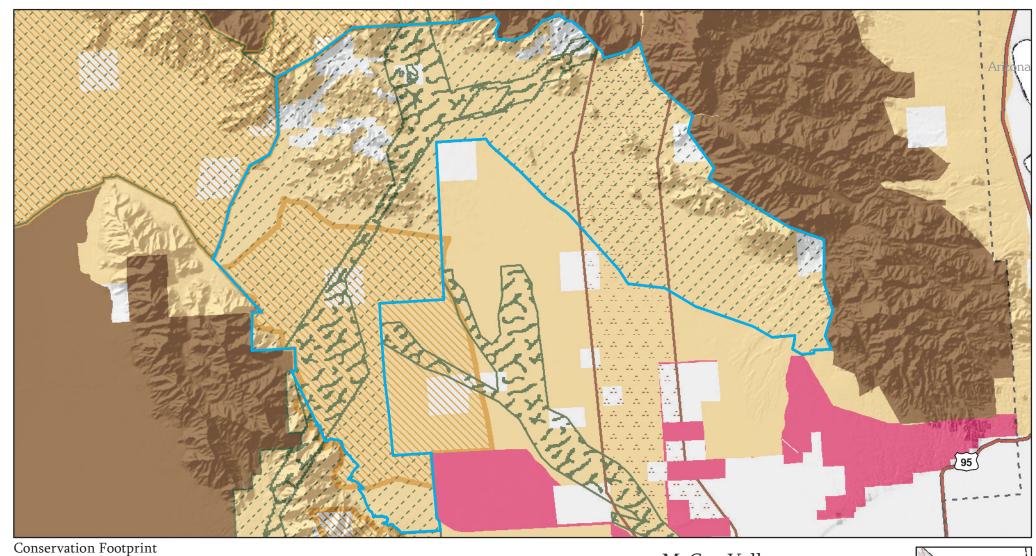
8/26/2015











Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

1% Disturbance Cap

### DRECP Boundary Land Status CDCA Boundary

Transmission Corridor

Development Focus Areas

Renewable Footprint

Bureau of Land Management

# McCoy Valley Alternative 3

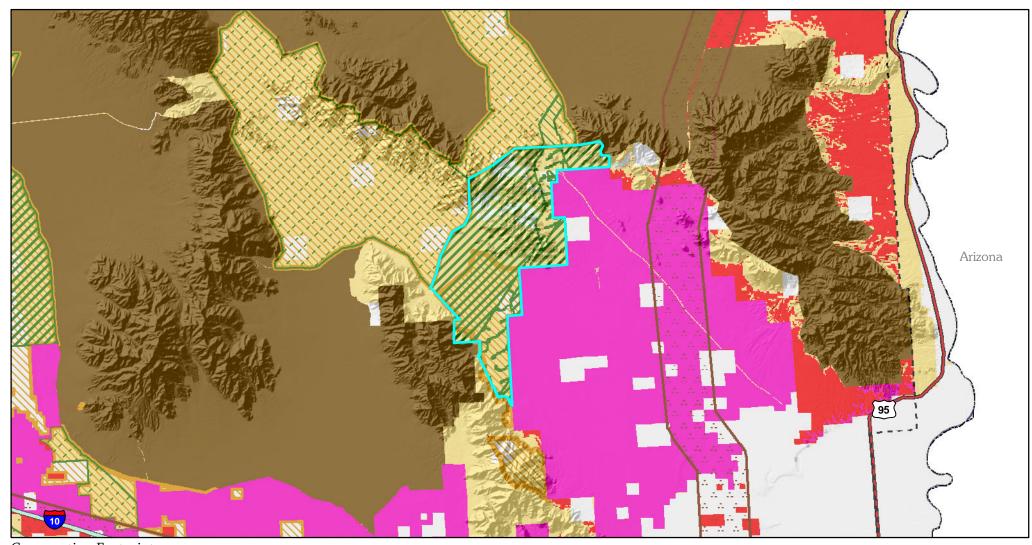
8/26/2015







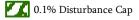




### Conservation Footprint



**ACEC Boundaries** 



0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

# DRECP Boundary CDCA Boundary Transmission Corridor Renewable Footprint

Variance Lands

Development Focus Areas

——— Miles

Land Status

Bureau of Land Management

# McCoy Valley Alternative 4

8/27/2015







### McCoy Wash

National Conservation Lands Ecoregion: Colorado Desert

### **Description/Location:**

The McCoy Wash is located between the Palen-McCoy Wilderness and the Big Maria Mountain Wilderness. It is approximately 3 miles north-northwest of Blythe.

### **Nationally Significant Values:**

Cultural Values: Microphyll ecological zones provided prehistoric peoples with numerous food and material resources in which to sustain life. Mojave people moved their residences up to these higher river mesas during the annual flooding of the Colorado River. The McCoy Mountain pediments where washes are deeply carved into the bedrock, feature rock art and evidence of habitation dating back to Paleoindian times. These petroglyphs are still considered as sacred to today's Native American People. Evidence of prehistoric trail segments are present along the desert pavements where the mountain bajadas and pediments interface. Cobble terraces that formed during the Pleistocene flooding of the Colorado river supplied prehistoric peoples with high quality toolstones for fashioning implements and were traded over long distances. Quarrying sites and thousands of single lithic reductions sites are located on these several-hundred-acre geologic features. Multiple fire-affected rock features have been located along the periphery of these cobble terraces that are believed to be either toolstone heat treating ovens or remnants of camps and cooking. Further research is pending.

**Scientific Values**: The McCoy wash features several ecological areas as it drains the slopes of two mountain ranges into the Colorado River to the east. Microphyll woodlands rocky canyons and sandy flats make up just a sample of the landforms present. Various avian, mammalian, and reptilian species call this area home.

Special Designations/Management Plan/ Date: No previous special designation.

### **Relevant and Importance Criteria:**

The proposed ACEC would protect critical desert dry wash woodland habitat in the McCoy Valley. The proposed ACEC would be a corridor of habitat within the Riverside East Solar Energy Zone. Desert dry wash woodland, also called microphyll woodland, consists of drought-deciduous, small-leaved (microphyllous), mostly leguminous trees of riparian or wash areas. The trees in the McCoy Wash reach 30 feet or more in height and include some very dense woodlands. This plant community is considered sensitive by the California Resources Agency and as an Important Bird Area by the Audubon Society. Wildlife species richness is much higher in this than other community types in the desert, and this community is slow to recover from disturbance. Threats include invasive exotics (particularly *Tamarix*), impacts related to heavy recreational use, and altered water flows. The California Desert Conservation Area Plan identified the McCoy Wash as a planned management area for wildlife.

**Overarching Goals:** Protect and enhance the microphyll woodland in the McCoy Wash.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

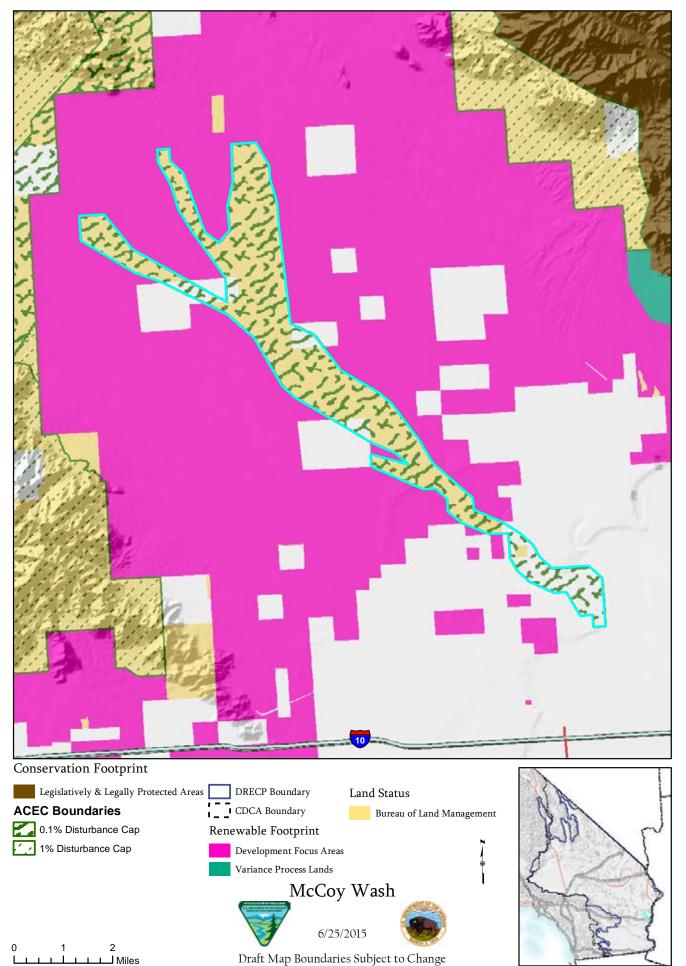
### **Designation and Acreage by Alternative:**

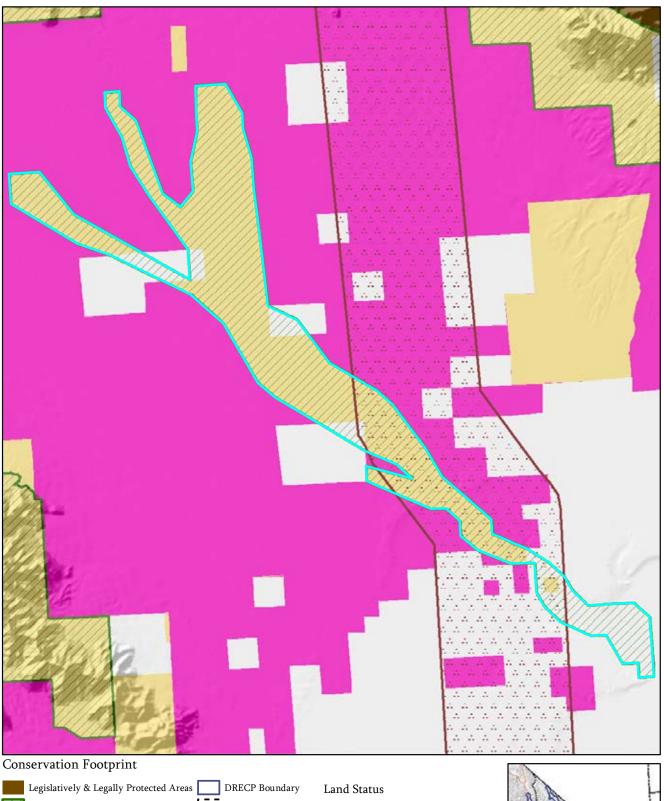
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	0	0	NA
Preferred Alternative	0	6,446	0	0.10%
1	700	6,400	0	0.10%
2	0	0	0	NA
3	1000	6,400	0	0.10%
4	0	0	0	NA

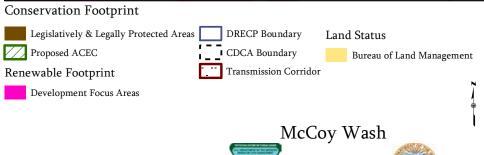
<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
<ul> <li>Management Actions:</li> <li>Restrict construction activities when soils are susceptible to heightened risk of erosion.</li> <li>Limit ground-disturbing activities when soils are wet in order to avoid compaction of soils.</li> <li>Comply with State of California air quality standards for all proposed actions that would contribute to particulate matter emissions.</li> <li>Objective: Protect the hydrologic flow regime in the McCoy Valley.</li> </ul>	Soil, water, air
Special status plant species within this ACEC include <i>Coryphantha alversonii</i> and <i>Proboscidea althaefolia</i> . Desert dry wash woodland is a NECO sensitive plant community and is considered sensitive by the California Resources Agency.  Objective: Protect and enhance the microphyll woodland in the McCoy Wash. Management Actions: control invasive exotics (particularly <i>Tamarix</i> ); protect, stabilize, and enhance ecological values; control vehicle access and impacts related to heavy recreational use; design projects to mitigate altered water flows.	Vegetation (incl. special status species)

Special Status animal species within the ACEC include desert tortoise, Couch's spadefoot, Townsend's big-eared bat, pallid bat, California leaf-nosed bat, cave myotis, occult little brown bat, gila woodpecker, vermilion flycatcher, yellow warbler, prairie falcon, rosy boa, Leconte's thrasher, mountain lion, burro deer, and Colorado Valley wood rat.	Fish and Wildlife (incl. special status species)
Management Action: Manage as VRM Class III	Visual Resources
Management Action: OHV Limited to designated routes. There are no designated hiking trails within the ACEC	Trails and Travel Management
Management Action: Area would be managed within the Eastern Riverside Extensive Recreation Management Area (ERMA). Provide dispersed opportunities focused on enjoyment of the ACEC qualities.	Recreation
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure
Objective: Protect resource values of the ACEC The area is a right of way exclusion area.	Rights of Way (ROW)
<ul> <li>Allocations:</li> <li>The ACEC would be closed to wind and solar development.</li> <li>ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.</li> </ul>	Renewable Energy
<ul> <li>Allocations:</li> <li>Continue to allow mineral material disposals on a case by-case basis subject to site specific environmental analysis. Allow no disposal of mineral material in Lands with Wilderness Characteristics.</li> <li>No-surface occupancy leasable minerals.</li> </ul>	Locatable Minerals Mineral Materials Non-Energy Leasables





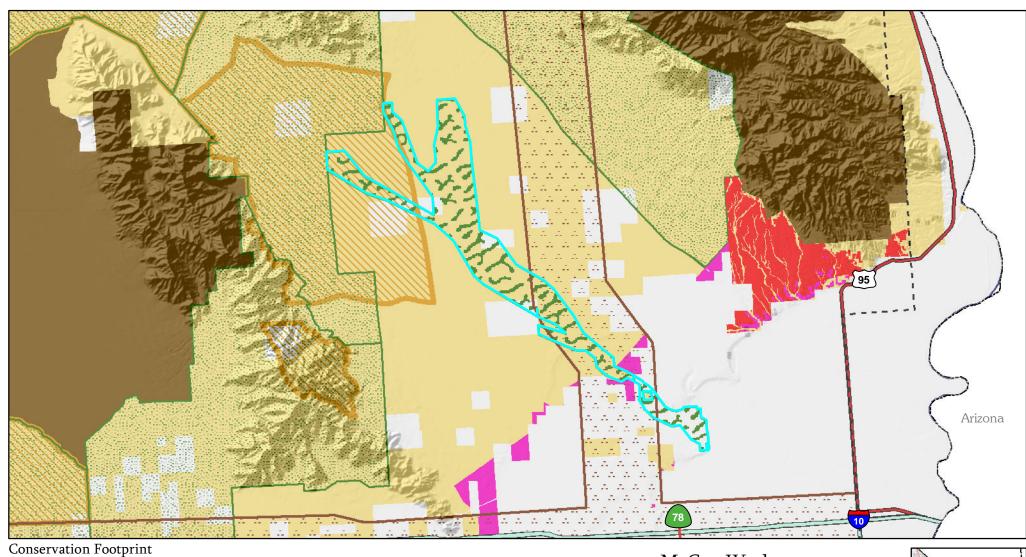


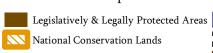












**ACEC Boundaries** 

0.1% Disturbance Cap

Wildlife Allocation

# DRECP Boundary

Land Status

Bureau of Land Management

CDCA Boundary

Transmission Corridor

### Renewable Footprint

Development Focus Areas

Variance Lands

# McCoy Wash Alternative 1

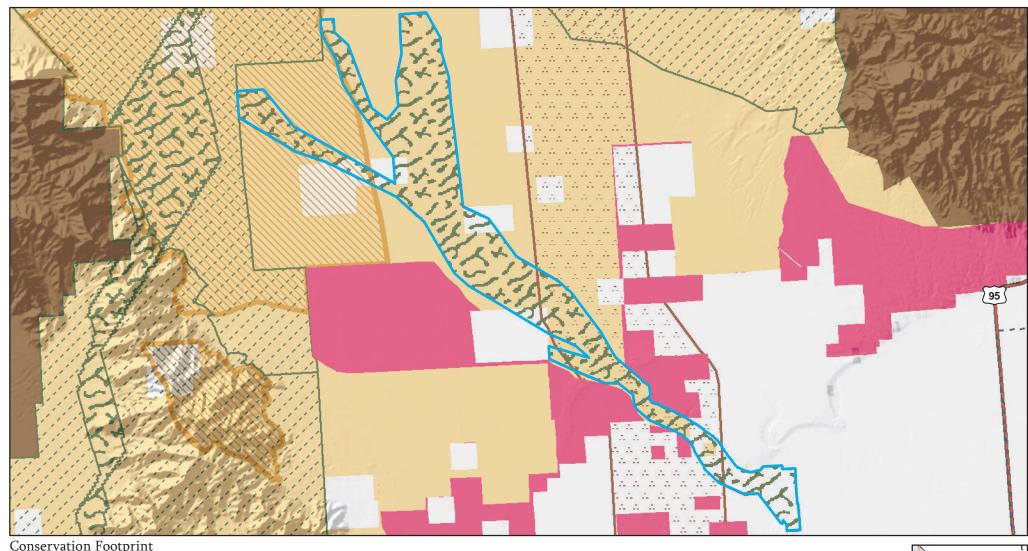
8/25/2015











### Conservation Footprint

Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

1% Disturbance Cap

# Land Status

DRECP Boundary

Transmission Corridor

Development Focus Areas

CDCA Boundary

Renewable Footprint

Bureau of Land Management

# McCoy Wash Alternative 3

8/26/2015









### Mule-McCoy Linkage

National Conservation Lands Ecoregion: Colorado Desert

### **Description/Location:**

The area is bordered on the west by the Chuckwalla ACEC, on the south by the Palo Verde Wilderness, and on the north by the Palen-McCoy Wilderness. Current management in the area includes the Mule Mountain Wildlife Habitat Management Area (WHMA) and Bighorn Sheep WHMAs under the Northern and Eastern Colorado Desert Coordinated Management Plan and the Mule Mountain ACEC, a cultural resources ACEC.

### **Nationally Significant Values:**

**Cultural:** The Mule-McCoy Linkage area has shown to be rich in cultural resources. Transportation and trade trails follow the bases of the mountains and branch out across the valley floors interconnecting the mountain range routes. Out in the valley center where wind-blown sand moves across the flats, these trails lose their physical visage but remain marked by their artifact scatters, such as pot drops (ceramics sherd scatters), lithic scatters, rock features, and isolated groundstone artifacts. Cremation sites are often revealed as dune sands move about. Desert Pavement features are extremely stable and preserve artifacts *in situ* for thousands of years.

**Scientific:** Archaeological study can reveal how generations of Native Americans lived and thrived in the sometimes inhospitable times. Studying these archaeological sites can reveal past climate fluctuations, and environmental communities and compare to our present time climate change models.

### Special Designations/ Management Plan/ Date:

Portions of this proposed ACEC are currently managed as a Bighorn Sheep Wildlife Habitat Management Area (WHMA) and as the Mule Mountain WHMA (NECO 2002).

### **Relevance and Importance Criteria:**

The proposed area would protect wildlife linkage habitat between the Chuckwalla ACEC/ Palo Verde Wilderness and the Palen-McCoy Wilderness. The California Department of Fish and Game has identified the area as being critical for burro deer connectivity in eastern Riverside County. Southern portions of the proposed area contain extensive significant microphyll woodland and known habitat for several rare species including the California State Endangered gila woodpecker. Microphyll woodland is a NECO sensitive plant community. The Mule, McCoy, and Palo Verde mountains are Bighorn Sheep WHMAs and are currently identified as unoccupied ranges. A corridor of sand south of Interstate 10 is the eastern extension of the Palen-Ford sand transport corridor/ Mojave fringe-toed Lizard habitat. The Mule Mountains are known to contain major bat colonies including a maternity roost for California leaf-nosed bats. The proposed area is known to be at a high sensitivity for cultural resources. Prehistoric Trails are present along the pediments and bajadas in the northern Mules and southern McCoys. These trails appear to have once connected across the I-10 corridor and numerous sites relative to trails appear within the sand transport corridor south of the 10. A National Register (NRHP) Petroglyph site and natural water source is located on the northwest edge of the Mules and from there, viewshed issues are of an elevated concern. Recent discoveries of Native American cremations have been documented in the area south of I-10, east of Wiley's Well Road, and North of the Mule Mountains. An ancient Pleistocene/Holocene transition period shoreline of Ford Dry Lake has been documented immediately west of the Wiley's Well Rest Stop and Paleoindian artifacts have been recorded along that shoreline contour, and along the southwestern pediment of the McCoy mountains, The area was also actively utilized during WWII for the Desert Training Center.

Recreation Area: This unit overlaps with the Mule Mountains SRMA.

**Lands with Wilderness Characteristics:** This unit contains 3,848 acres of lands that would be managed to protect wilderness character under the preferred alternative. The CMAs for lands managed to protect wilderness character would also apply in those areas.

### **Overarching Goals:**

- Maintain wildlife connectivity between the Chuckwalla ACEC/ Palo Verde Wilderness and the Palen-McCoy Wilderness.
- Bighorn sheep goals and objectives are detailed in Section 2.3.1 of the NECO Plan.
- Desert mule deer goals and objectives are detailed in Section 2.3.1 of the NECO Plan.
- Special Status Species goals and objectives are detailed in Section 2.3.2 of the NECO Plan.
- Maintain the integrity of the sand transport system/ sand sources and Mojave fringed-toed lizard habitat.
- Protect the microphyll woodland habitat, particularly the microphyll woodland on the southern portion of the ACEC in the area of the Palo Verde Mesa.
- Provide for the protection of cultural resources associated with the Palen and Ford playas.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

### **Designation and Acreage by Alternative:**

Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	0	0	NA
Preferred Alternative	30,426	51,477	0	0.10%, 0.5%, 1%
1	2,200	0	71,600	Wildlife Allocation
2	51,000	51,000	0	0.25%
3	2,300	71,600	0	0.10%, 0.5%, 1%
4	0	0	0	NA

<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
Restrict construction activities when soils are susceptible to heightened risk of erosion. Limit ground-disturbing activities when soils are wet in order to avoid compaction of soils.	Soil, water, air
Comply with the State of California for all proposed actions that would contribute to particulate matter emissions.	
Objective: Prevent excessive ground water withdrawal that would potentially threatened groundwater dependent vegetation.  Action: Allow no activities that would create a water basin deficit/ decline.	
Objective: Protective water flows/ hydrologic regime surrounding microphyll woodlands.	
Special status plant species within this ACEC include <i>Coryphantha alversonii</i> and <i>Proboscidea althaefolia</i> . Desert dry wash woodland (microphyll woodland) is a sensitive vegetation type in the proposed ACEC.	Vegetation (incl. special status species)
Objective: Control invasive species on the sand dunes (e.g., tamarisk within the palo verde thickets, sahara mustard within the dunes/ MFTL habitat).  Action: Establish cooperative regional weed management area.	
Objective: Protect and enhance microphyll woodlands. Action: control invasive exotics (particularly <i>Tamarix</i> ); protect, stabilizae, and enhance ecological values of the microphyll wood; control vehicle access and impacts related to heavy recreational use; design projects to limit altering water flows.	
Special Status animal species within the ACEC include Couch's spadefoot toad, Mojave fringe-toed lizard, Chuckwalla, Townsend's big-eared bat, pallid bat, pocketed free-tailed bat, cave myotis, occult little brown bat, California leafnosed bat, fringed myotis, prairie falcon, mountain plover, gila woodpecker, yellow warbler, rosy boa, Leconte's thrasher, mountain lion, burro deer, bighorn sheep, desert tortoise, and Colorado Valley wood rat.	Fish and Wildlife (incl. special status species)
Objective: Bighorn sheep conservation. The proposed ACEC would protect bighorn sheep demes and corridors. These areas are currently managed in the NECO Plan as Bighorn Sheep Wildlife Habitat Management Areas. The Mule, McCoy, and Palo Verde mountains are identified as currently unoccupied ranges. Section 2.3.1 of the NECO Plan contains the goals and objectives of the bighorn sheep conservation strategy, including protecting essential habitat, maintain movement corridors, constructing of new water sources to expand useable habitat for sheep and the reestablishing lost demes in the Mule and Palo Verde mountains.	
Objective: Desert mule deer conservation. Section 2.3.2 of the NECO Plan contain the goals and objectives of desert mule deer conservation, including	

the development of new water sources to expand useable habitat for deer.

*Objective:* Special status species goals and objectives. Section 2.3.3 of the NECO Plan details the goals and objectives of the other special status species found in the NECO Planning Area.

*Objective*: Maintain wildlife connectivity between the Chuckwalla ACEC/ Palo Verde Wilderness and the Palen-McCoy Wilderness.

Objective: Maintain the integrity of the sand transport system and sand sources. Control invasive species on the sand dunes (e.g., control tamarisk within the palo verde thickets, control sahara mustard within the dunes/ MFTL habitat).

Action: prevent or mitigate projects that would have the potential to impede sand transport or would impact sand source areas.

*Objective*: Provide for the protection of the extensive cultural resources associated with the Palen and Ford playas and Complete Class I-III inventory and conduct tribal consultation.

Action Item 1:Exlcude OHV use within one mile of cultural resources except on allowed roads.

Action Item 2: Exclude camping within one mile of cultural resources.

Objective: General Management of Cultural Resources

Action Item 1: Ensure that management of cultural resources within the ACEC are consistent with agency responsibilities provided in Section 110 of the National Historic Preservation Act (NHPA).

Action Item 2: Ensure that federal actions that may affect historic properties within the ACEC are properly reviewed and considered consistent with the requirements of Section 106 of the NHPA.

Action Item 3: Ensure confidentiality of information about sensitive cultural resources consistent with Section 304 of the NHPA and Section 9 of the Archaeological Resources Protection Act.

Objective: Establish Baseline Resource Information/Identify and Document Cultural Resources

Action Item 1: Survey, identify and record new cultural resources within the ACEC boundaries.

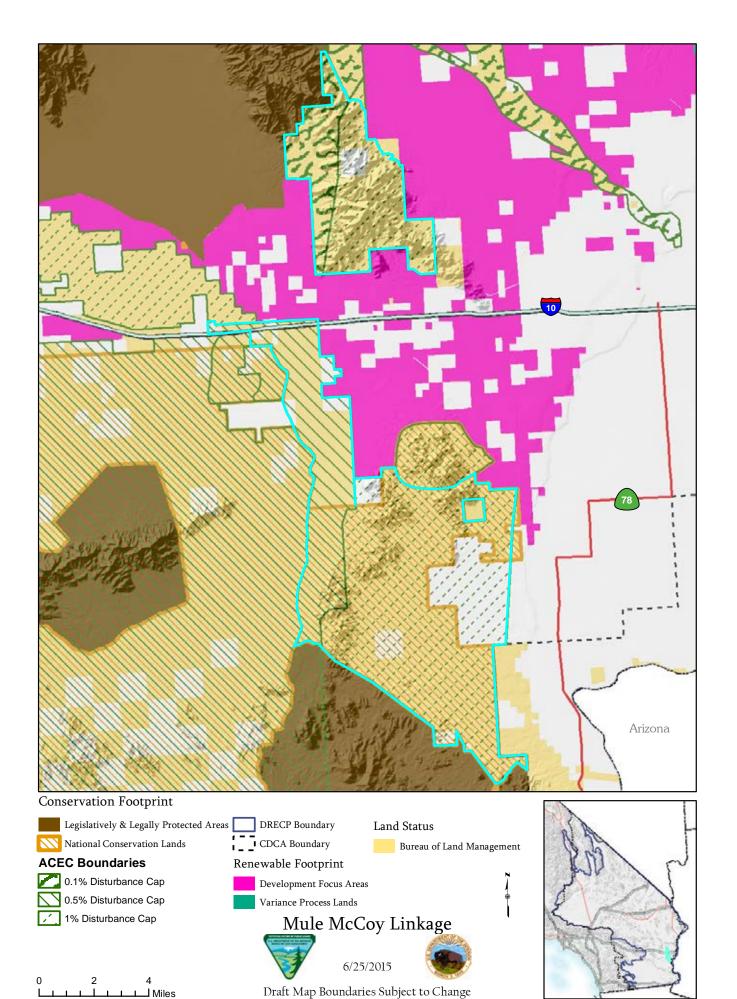
Action Item 2: Update records for existing cultural resources within the ACEC. Action Item 3: Integrate survey information into BLM cultural resources management systems (cultural GIS geodatabase)

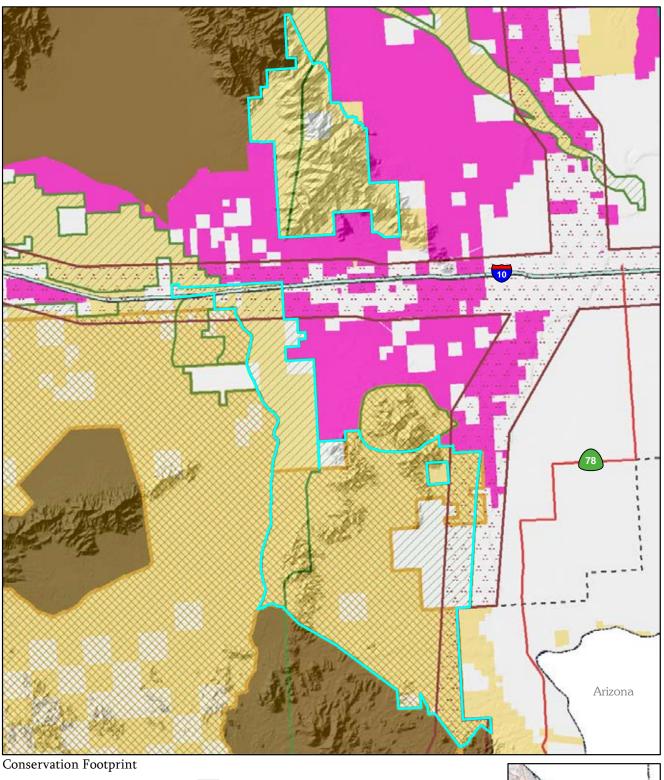
Objective: Evaluate and Nominate Cultural Resources
Action Item 1: Utilizing the eligibility criteria of the National Register of Historic
Places, complete an evaluation of all cultural resources in the ACEC for
eligibility either as an individual historic property or determine whether there

**Cultural Resources** 

significant resources might comprise a district.	
Action Item 2: Complete nominations to the National Register of Historic	
Places for significant historic properties.	
Objective: Identify Threats to Cultural Resources	
Action Item 1: Develop baseline assessment of specific natural and man-made	
threats to cultural resources in the ACEC (i.e., erosion, looting and vandalism,	
grazing, OHV).	
Objective: Monitoring/Protective Measures	
Action Item 1: Provide on-going monitoring for cultural resources based on the	
threat assessment.	
Action Item 2: Identify, develop or incorporate standard protection measures	
and best management practices to address threats.	
Action Item 3: Where specific threats are identified, implement protection	
measures consistent with agency Section 106 responsibilities.	
mediates consistent with agency section 100 responsibilities.	
Objective: Interpretation/Public Awareness	
Action Item 1: Facilitate research, scientific study, and general study of cultural	
resources within the ACEC.	
Action Item 2: Where appropriate and with consideration of site protection	
and confidentiality, develop and provide interpretation to the public about	
cultural resources, including signs, interpretive panels, web-based information.	
cultural resources, including signs, interpretive panels, web-based information.	
Manage as VRM Class II (south of I-10) and Class III (north of I-10)	Visual Resources
Allocation:	Trails and Travel
OHV use limited to designated routes. There are no designated hiking trails at	Management
this time.	3
Objective: Area would be managed as within the Eastern Riverside Extensive	Recreation
Recreation Management Area (ERMA). Provide dispersed opportunities	
focused on enjoyment of the ACEC qualities.	
quantics.	
This ACEC overlaps the Mule Mountains LTVA Special Recreation Management	
Area (SRMA). Please refer to the SRMA summary for details on recreation	
goals/management	
godis/ management	
Objective: Consolidate through tenure adjustment.	Land Tenure
Management Action: Acquire inholdings, edgeholdings and other interests	
from willing sellers.	
Tom Timing School	
Objective: Protect resource values of the ACEC	Rights of Way (ROW)
Dajetare Frotest resource values of the Mole	onco or way (now)
Management Action: Land use authorization proposals (new, renewal, and	
amendment) will be analyzed on a case-by-case basis to assess whether they	
are compatible with the ACEC and its management goals.	
i are compatible with the ACLC and its management KUdis.	

The ACEC would be closed to wind and solar development.	Renewable Energy
ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	
Continue to allow mineral material disposals on a case by-case basis subject to site specific environmental analysis. Allow no disposal of mineral material in Lands with Wilderness Characteristics.	Locatable Minerals Mineral Materials Non-Energy Leasables
No-surface occupancy leasable minerals.	





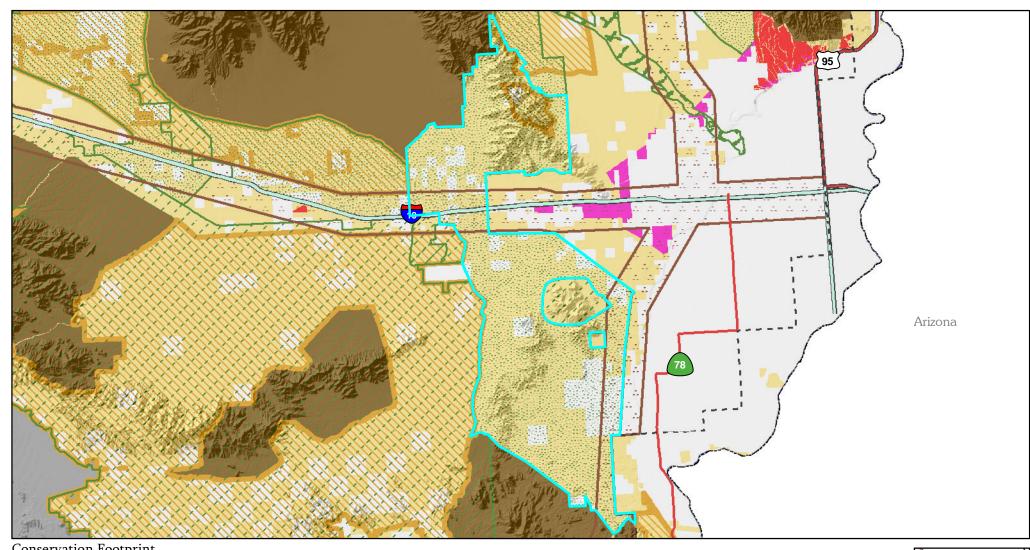


7/14/2015

2 4

Draft Map Boundaries Subject to Change





### Conservation Footprint Legislatively & Legally Protected Areas DRECP Boundary Land Status CDCA Boundary National Conservation Lands Bureau of Land Management Transmission Corridor **ACEC Boundaries** Department of Defense 0.1% Disturbance Cap Renewable Footprint 1% Disturbance Cap Development Focus Areas Wildlife Allocation Variance Lands 8 **⅃** Miles

# Mule McCoy Linkage Alternative 1

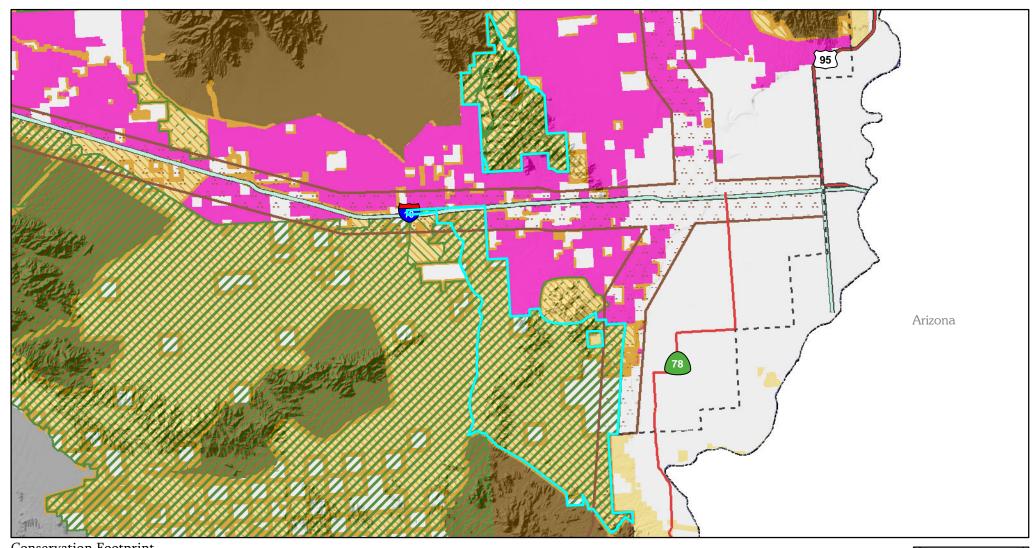
Alternative

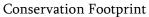
8/25/2015











Legislatively & Legally Protected Areas National Conservation Lands

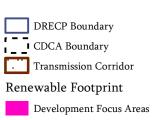
**ACEC Boundaries** 

0.1% Disturbance Cap

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap



### Land Status

Bureau of Land Management Department of Defense



# Mule McCoy Linkage

Alternative 2

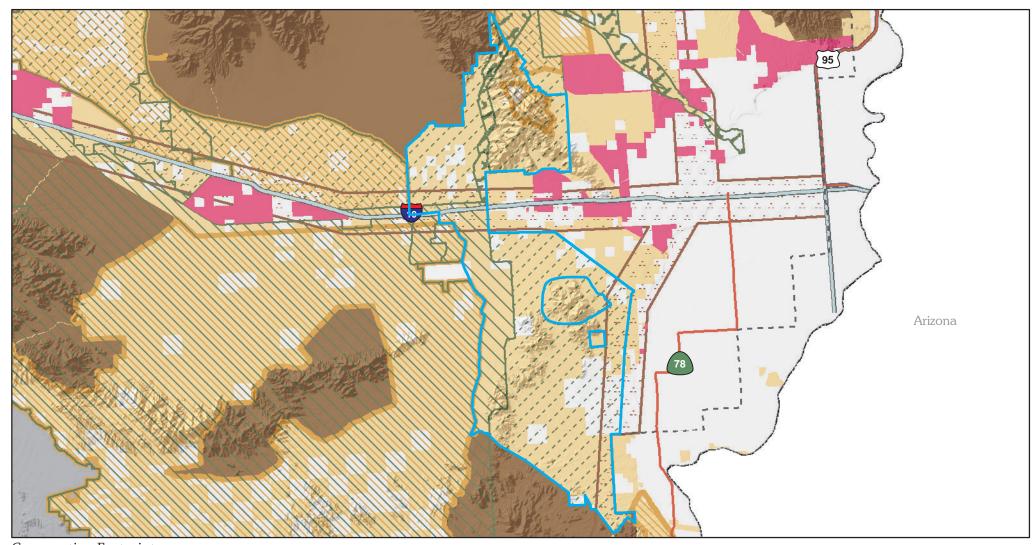
8/26/2015











### Conservation Footprint

Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

Miles

### Land Status

Bureau of Land Management

Transmission Corridor Department of Defense

## Renewable Footprint

CDCA Boundary

DRECP Boundary

Development Focus Areas

# Mule McCoy Linkage

Alternative 3

8/26/2015









### **Mule Mountains**

National Conservation Lands Ecoregion: Colorado Desert

**Description/Location:** Eastern Riverside county approx. 11 miles southwest of the city of Blythe. Accessible from Palo Verde Mesa Rd. off I-10

### **Nationally Significant Values:**

**Cultural Values:** Relative cultural values include prehistoric aboriginal trails, scatters of broken pottery, rock quarries, cleared circles, a major National Register listed petroglyph location and the remains of WWII military activity. The site could reveal new information about past aboriginal life in the area. The petroglyph site is adjacent to a large tenaja that is beneficially placed at the bottom of a >30 foot dry wash waterfall facing north to conveniently shade the pool all year long. This very large and deep pool supplied water to travelers along the Coco-Maricopa trail approximately 15 miles west of the Colorado River. At the northeast corner of the Mule mountains there is BLM interpretive signing and protective fencing where multiple historic WW-II Desert Training Center fortifications are preserved in the desert pavement, as well as an intersection of two prehistoric trails and a large dance circle. There have been numerous prehistoric cremation sites identified in the area just outside of the ACEC and along the north, east, and west bajadas. This is also the confluence of territories of the Mojave and Quechan Tribes who both attach spiritual and cultural values to these mountains. The Halchidhoma also occupied the area in protohistoric times.

**Scientific Values:** The archaeological sites could reveal new information about past aboriginal life in the area. The Mule Mountains contain numerous mineral deposits and were mined in historic times. Recent paleontological discoveries along the southeastern bajada have revealed a significantly increased probability of encountering fossils of mammals and reptiles and other vertebrates of Pleistocene age including tortoise, badger, and pachyderms.

Special Designations/Management Plan/Date: ACEC Plan No. 58, August 1981

**Relevance and Importance Criteria**: Some areas within the ACEC provide a combination of meteorological, geological, hydrological, topographical features that have been identified as important climate refugia (slow/minimized climate changes) for wildlife species.

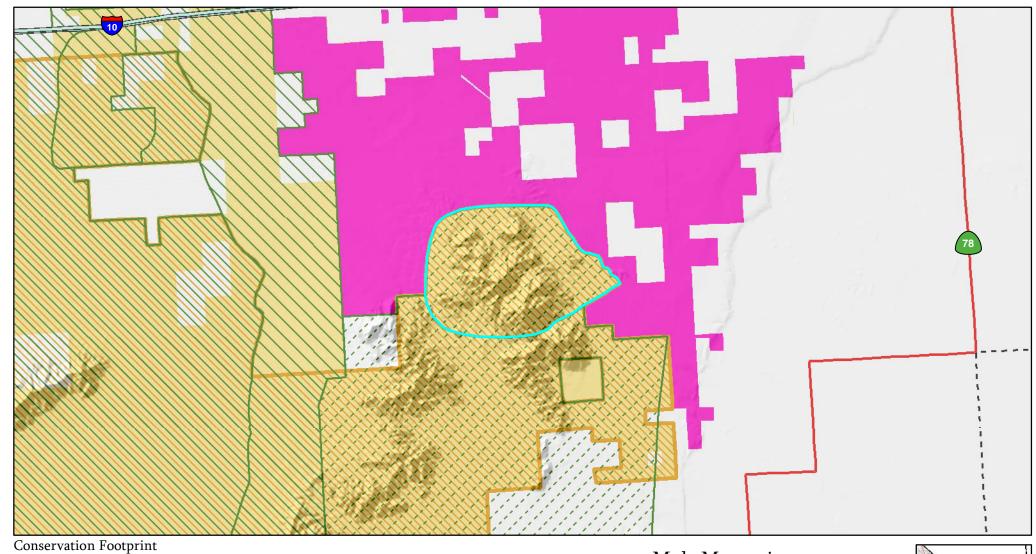
Overarching Goals: Protect cultural values of Mule Mountains ACEC, providing for compatible public uses.

Designation and Acreage by Alternative:					
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap	
No Action	0	4,100	0	NA	
Preferred Alternative	4,100	4,100	0	1%	
1	0	4,100	0	1%	
2	4,100	4,100	0	1%	
3	0	4,100	0	1%	
4	0	4,100	0	1%	

<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
<b>Objective 1</b> : Protect biodiversity and manage for resilience (protect climate refugia).	Climate Change and Adaptation
Management Action 2: Consider actions that enhance the primary productivity of climate refugia with native species restoration, reduced soil surface disturbance, and habitat infrastructure to increase carrying capacity of refugia (e.g., wetland, oasis).	
<b>Objective 2</b> : Maintain and or enhance key ecosystem processes (e.g., carbon sequestration, water residence time) and prepare and respond to significant disturbances to the environment (e.g. floods).	
Management Action 1: Develop proactive and responsive management actions for potentially dangerous and damaging disturbances to the environment, which are exacerbated by climate change (e.g. wildfire, flash floods, etc.).	
Manage as VRM Class II	Visual Resources
Allocation: OHV limited to designated routes.	Trails and Travel
There are no designated hiking trails at this time	Management
Allow for low-impact, dispersed recreational opportunities (ie- camping, hiking, wildlife watching, hunting, etc.) that are compatible with the resources of the ACEC  Manage within the Eastern Riverside Extensive Recreation Management Area (ERMA)	Recreation
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land tenure

Objective: Protect resource values of the ACEC Management Action: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.	Rights-of-Way
Closed to renewable energy development.  ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	Renewable Energy
Mining claims present within ACEC. Standard rule sets apply.	Locatable Minerals Mineral Materials Non-energy Leaseables



# Conservation Footprint National Conservation Lands DRECP Boundary Land Status ACEC Boundaries CDCA Boundary Bureau of Land Management O.5% Disturbance Cap Renewable Footprint 1% Disturbance Cap Development Focus Areas

# Mule Mountains

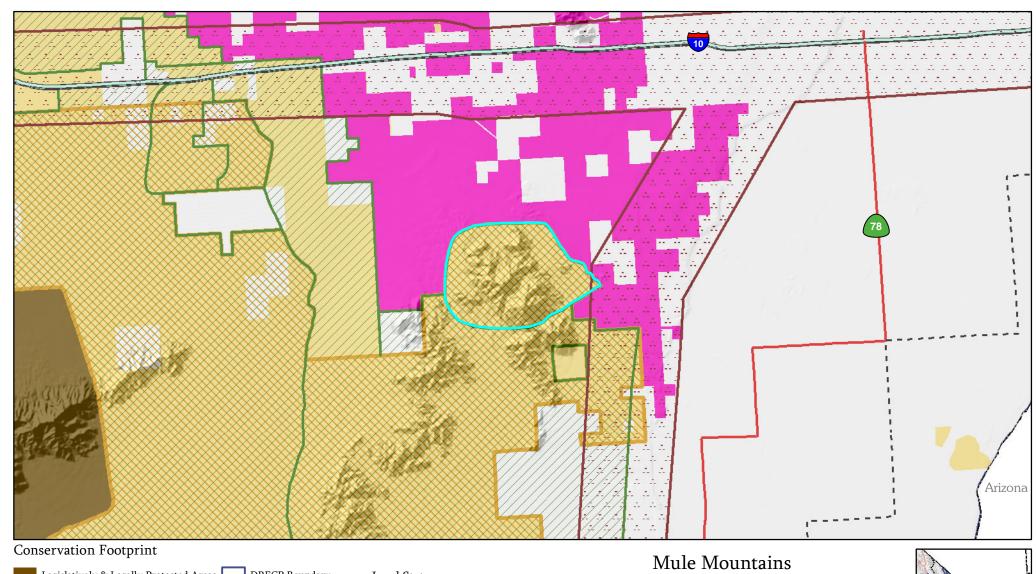
6/24/2015

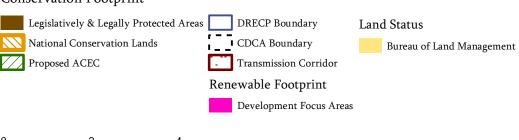












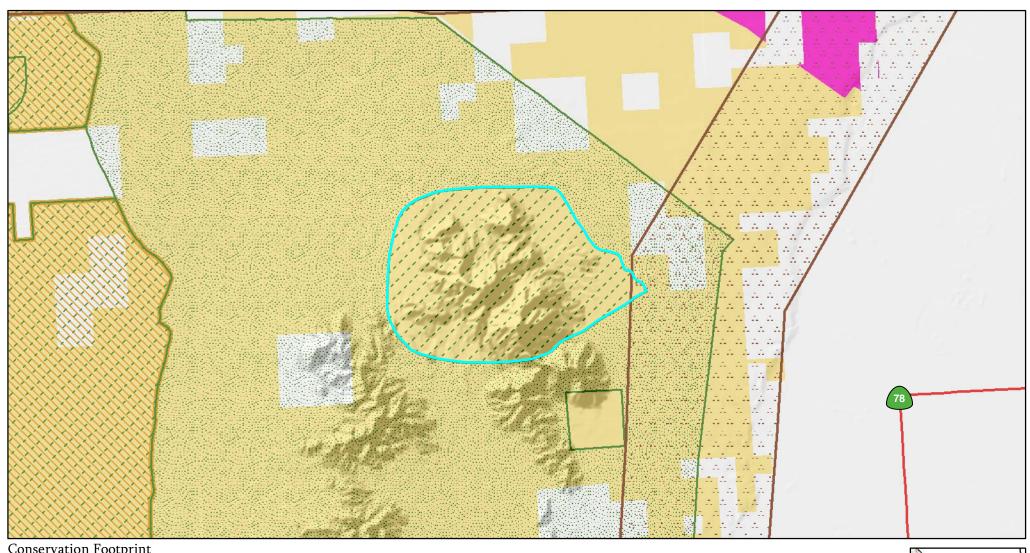
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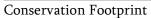














# Mule Mountains

Alternative 1

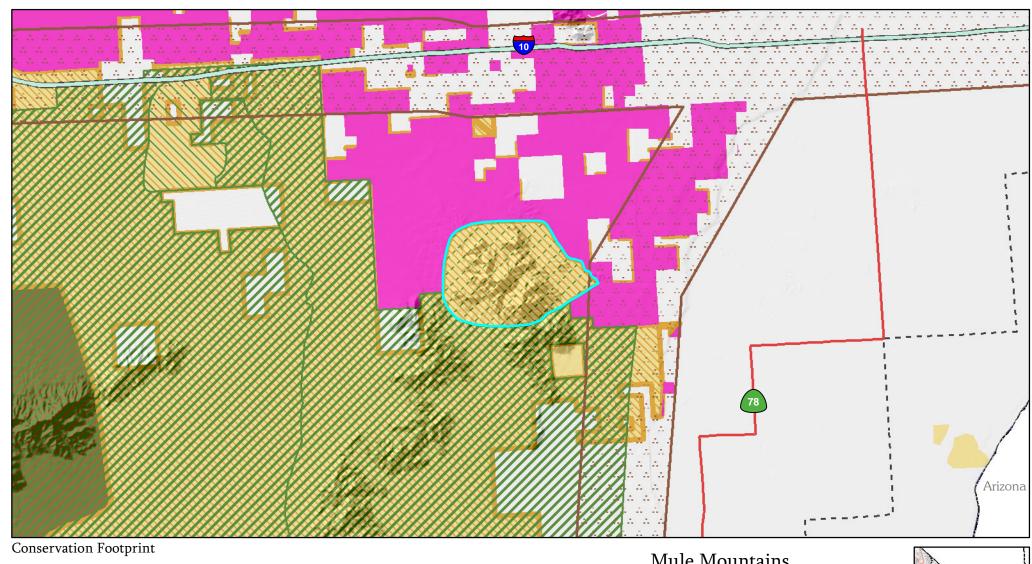
8/25/2015











Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.25% Disturbance Cap 0.5% Disturbance Cap

1% Disturbance Cap

Miles

# DRECP Boundary

CDCA Boundary

Transmission Corridor

Renewable Footprint Development Focus Areas

Land Status

Bureau of Land Management

# Mule Mountains

Alternative 2

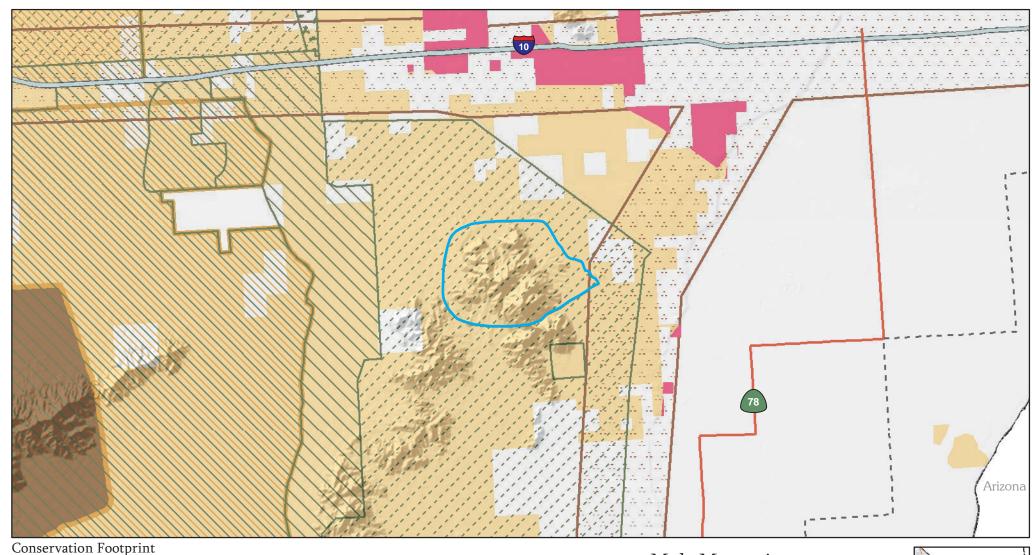
8/26/2015











Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap
0 1 2

DRECP Boundary
CDCA Boundary

Transmission Corridor

Renewable Footprint

Development Focus Areas

Land Status

Bureau of Land Management

# Mule Mountains

Alternative 3

8/26/2015



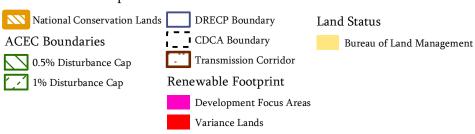








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# Mule Mountains

Alternative 4

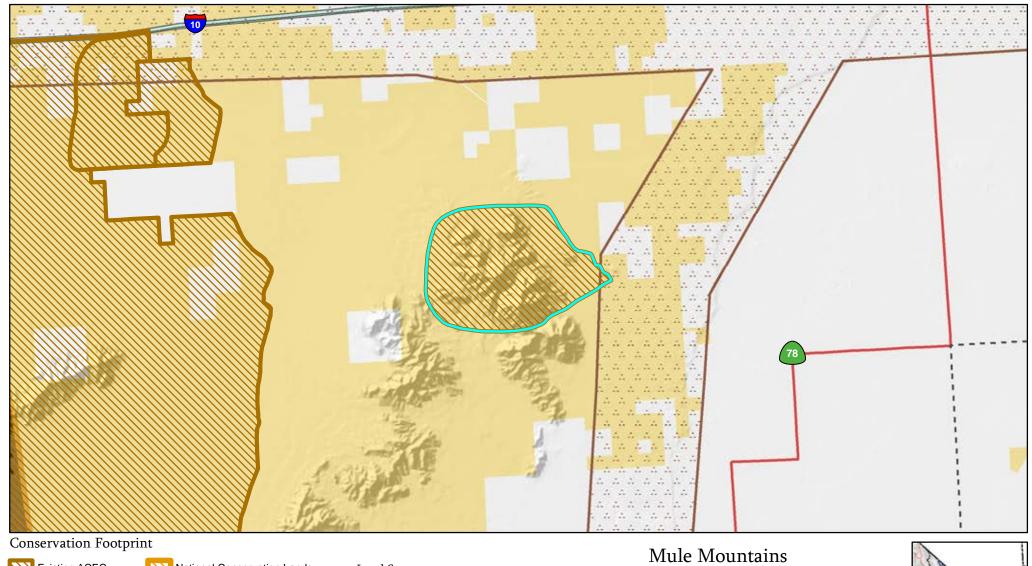
8/27/2015













# No Action

9/15/2015

Draft Map Boundaries Subject to Change









DRECP Boundary

#### Palen Dry Lake

National Conservation Lands Ecoregion: Colorado Desert

**Description/Location**: Located in an area of sand dunes along the southeast shoreline of Palen Dry Lake and between Palen Dry Lake and the southwest tip of the Palen Mountains. Accessible from the Corn Springs Road exit from Interstate 10.

### **Nationally Significant Values:**

**Cultural values:** The Palen Dry Lake and surrounding area features several archaeological sites that are vast intense, and eligible for listing on the National Register of Historic Places (NRHP). Prehistoric Trails along the bajada/pediment interface remain preserved on the desert pavements and host well preserved evidence of past trade and travel in the form of lithic and ceramic scatters, cleared circles/rock rings, rock alignments, and petroglyphs. Native Americans hold these places sacred. Shifting sands constantly alternate from hiding to revealing portions of sites as the heavier artifacts remain in place while dunes gradually migrate from the northwest to the southeast toward the Ford Dry Lake area.

**Scientific Values:** Small disparate microphyll woodland habitats are spread across the southeast slopes of the Palen mountains where the slopes meet the lakebed. These areas provide researchers with myriad evidence of past and present scientific knowledge. Lake sediments can reveal past ecological data, and climate patterns over many millennia.

**Special Designations/Management Plan/Date:** ACEC Plan No. 55 (09/22/1981), Palen-Ford Wildlife Habitat Management Area (WHMA)(NECO 2002)

#### **Relevance and Importance Criteria:**

**Cultural:** The Palen Dry Lake and surrounding area features several archaeological sites that are vast intense, and eligible for listing on the National Register of Historic Places (NRHP). Prehistoric Trails along the bajada/pediment interface remain preserved on the desert pavements and host well preserved evidence of past trade and travel in the form of lithic and ceramic scatters, cleared circles/rock rings, rock alignments, and petroglyphs.

**Biological:** Small disparate microphyll woodland habitats are spread across the southeast slopes of the Palen mountains where the slopes meet the lakebed.

**Lands with Wilderness Characteristics:** This unit includes 3,506 acres of lands that would be managed to protect wilderness character under the preferred alternative. The CMAs for lands managed to protect wilderness character would also apply in those areas.

**Overarching Goals:** Protect archaeological sites, providing for compatible public uses.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict

with those values.

**Designation and Acreage by Alternative:** 

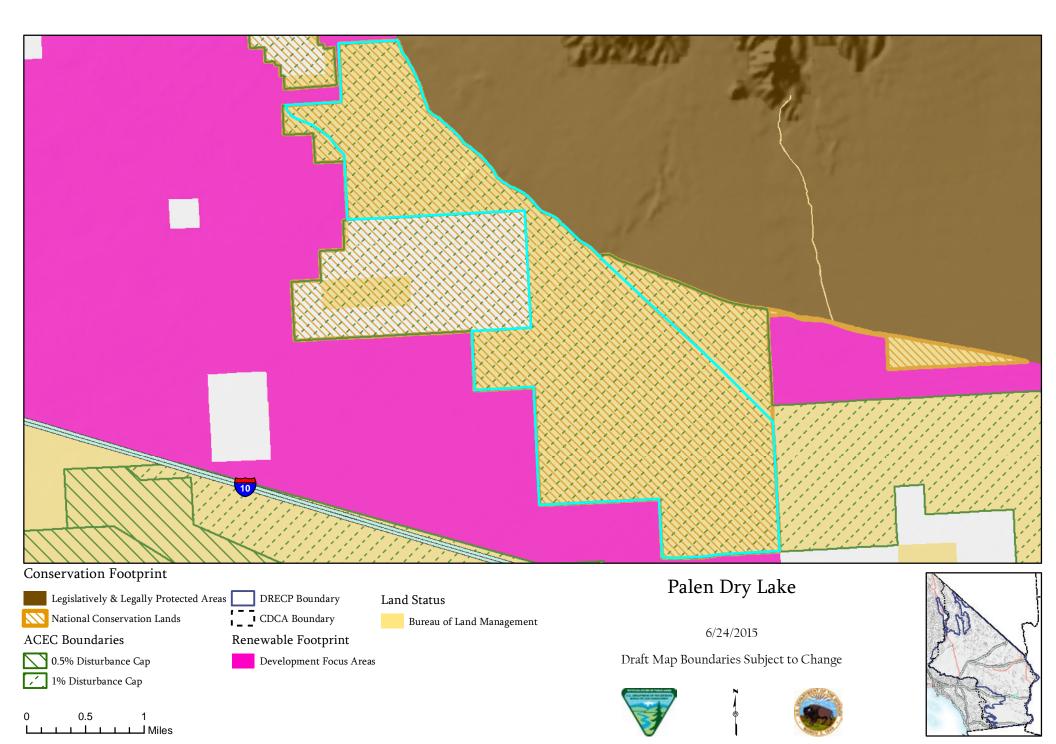
200.8	710.00.80			
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	0	0	NA
Preferred Alternative	3,625	3,625	0	1%
1	3,500	3,600	0	1%
2	3,600	3,600	0	1%
3	3,600	3,600	0	1%
4	3,400	3,600	0	1%

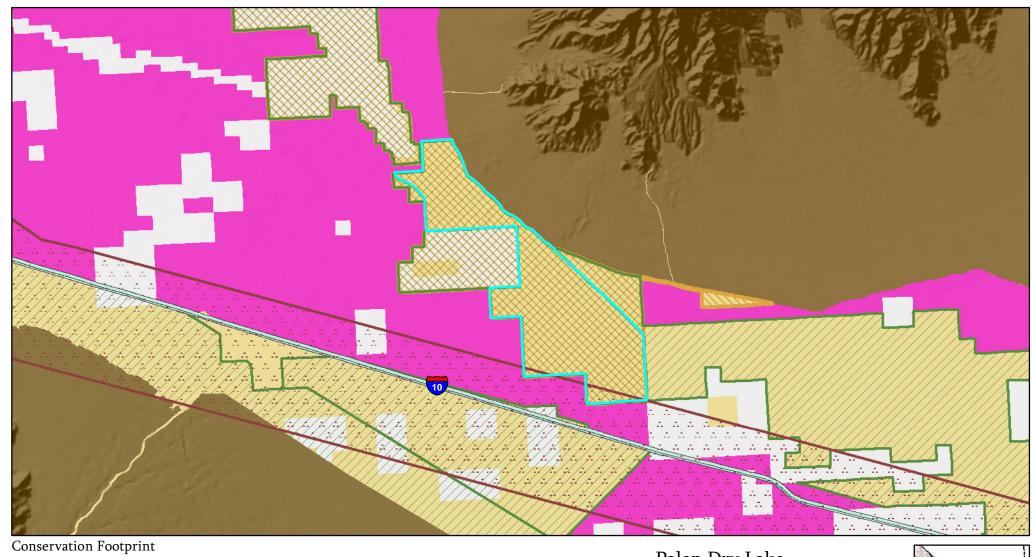
<sup>\*</sup> Acreage values are for BLM managed lands

Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
Objective: To protect the cultural resources within the ACEC from inadvertent	Cultural Resources
damage by off-road vehicle use.	
Action: Access restricted to approved routes of travel and closed to OHV.	
Objective: General Management of Cultural Resources	
Action Item 1: Ensure that management of cultural resources within the ACEC	
are consistent with agency responsibilities provided in Section 110 of the	
National Historic Preservation Act (NHPA).	
Action Item 2: Ensure that federal actions that may affect historic properties	
within the ACEC are properly reviewed and considered consistent with the	
requirements of Section 106 of the NHPA.	
Action Item 3: Ensure confidentiality of information about sensitive cultural	
resources consistent with Section 304 of the NHPA and Section 9 of the	
Archaeological Resources Protection Act.	
Objective: Establish Baseline Resource Information/Identify and Document	
Cultural Resources	
Action Item 1: Survey, identify and record new cultural resources within and adjacent to the ACEC boundaries.	
Action Item 2: Update records for existing cultural resources within the ACEC.	
Action Item 3: Integrate survey information into BLM cultural resources	
management systems (cultural GIS geodatabase)	
Objective: Evaluate and Nominate Cultural Resources	
Action Item 1: Utilizing the eligibility criteria of the National Register of Historic	
Places, complete an evaluation of all cultural resources in the ACEC for	
eligibility either as an individual historic property or determine whether there	

significant resources might comprise a district. Action Item 2: Complete nominations to the National Register of Historic Places for significant historic properties.	
Objective: Identify Threats to Cultural Resources Action Item 1: Develop baseline assessment of specific natural and man-made threats to cultural resources in the ACEC (i.e., erosion, looting and vandalism, grazing, OHV).	
Objective: Monitoring/Protective Measures Action Item 1: Provide on-going monitoring for cultural resources based on the threat assessment.	
Action Item 2: Identify, develop or incorporate standard protection measures and best management practices to address threats.  Action Item 3: Where specific threats are identified, implement protection measures consistent with agency Section 106 responsibilities.	
Objective: Interpretation/Public Awareness Action Item 1: Facilitate research, scientific study, and general study of cultural resources within the ACEC.	
Action Item 2: Where appropriate and with consideration of site protection and confidentiality, develop and provide interpretation to the public about cultural resources, including signs, interpretive panels, web-based information.	
Manage as VRM Class II	Visual Resources
Allotment: OHV limited to designated routes (none exist), thus no OHV	Trails and Travel
allowed. There are no designated hiking trails at this time.	Management
Objective: Monitor visitor use and effectiveness of management prescriptions Action: Establish monitoring patrols	Recreation
Allow for low-impact, dispersed recreational opportunities (ie- hiking, hunting, wildlife watching, etc.) that are compatible with ACEC resources.	
Objective: Protect resource values of the ACEC Management Action: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.	Rights of Way
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure
Closed to renewable energy development.	Renewable Energy
ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	

Continue to allow mineral material disposals on a case by-case basis subject to	Locatable Minerals
site specific environmental analysis. Allow no disposal of mineral material in	Mineral Materials
Lands with Wilderness Characteristics.	Non-energy Leaseables
No-surface occupancy leasable minerals.	





# Legislatively & Legally Protected Areas DRECP Boundary Land Status National Conservation Lands DrecP Boundary Bureau of Land Management Proposed ACEC Transmission Corridor Renewable Footprint Development Focus Areas

# Palen Dry Lake

7/14/2015

Draft Map Boundaries Subject to Change

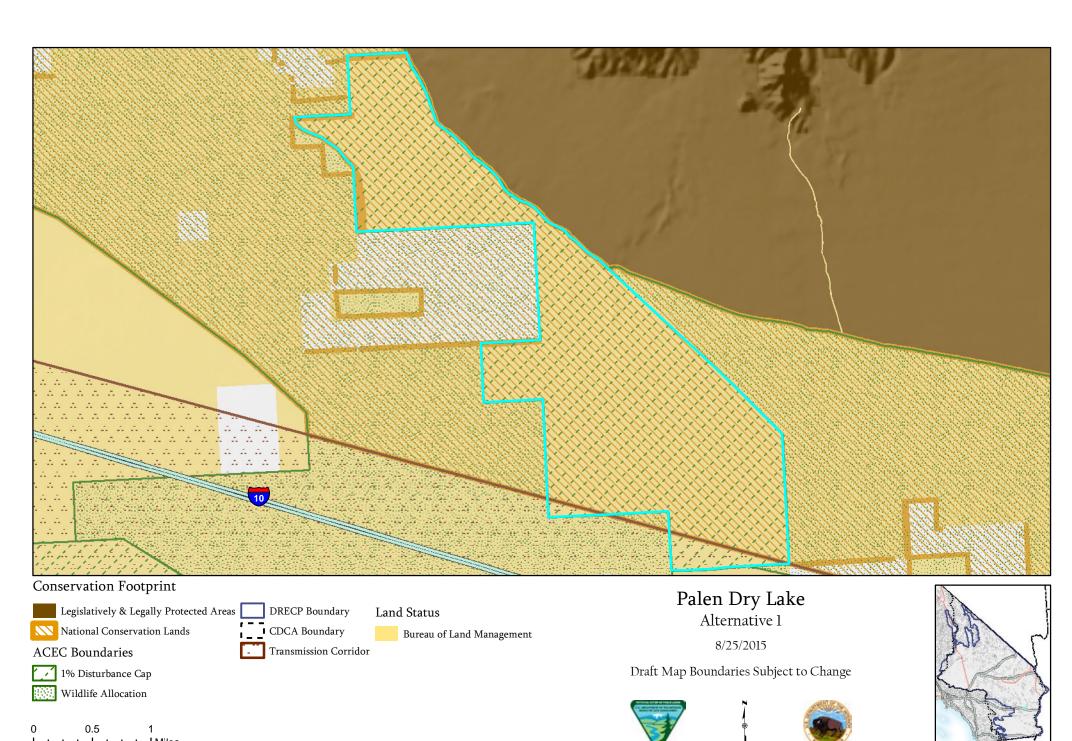


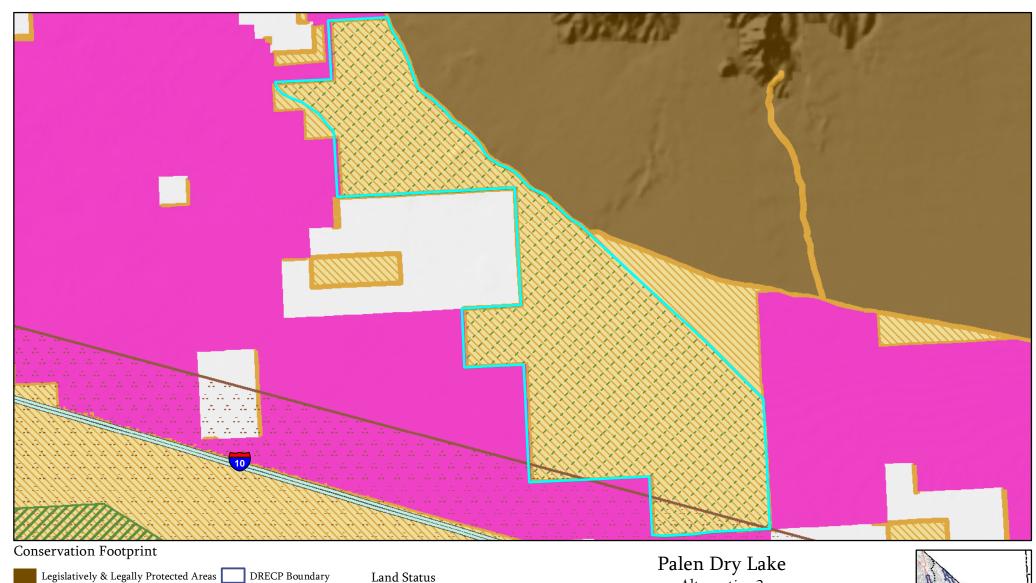






Miles





National Conservation Lands

**ACEC Boundaries** 

0.25% Disturbance Cap

1% Disturbance Cap

\_\_\_\_\_ Miles

CDCA Boundary Bureau of Land Management - Transmission Corridor

Renewable Footprint

Development Focus Areas

# Alternative 2

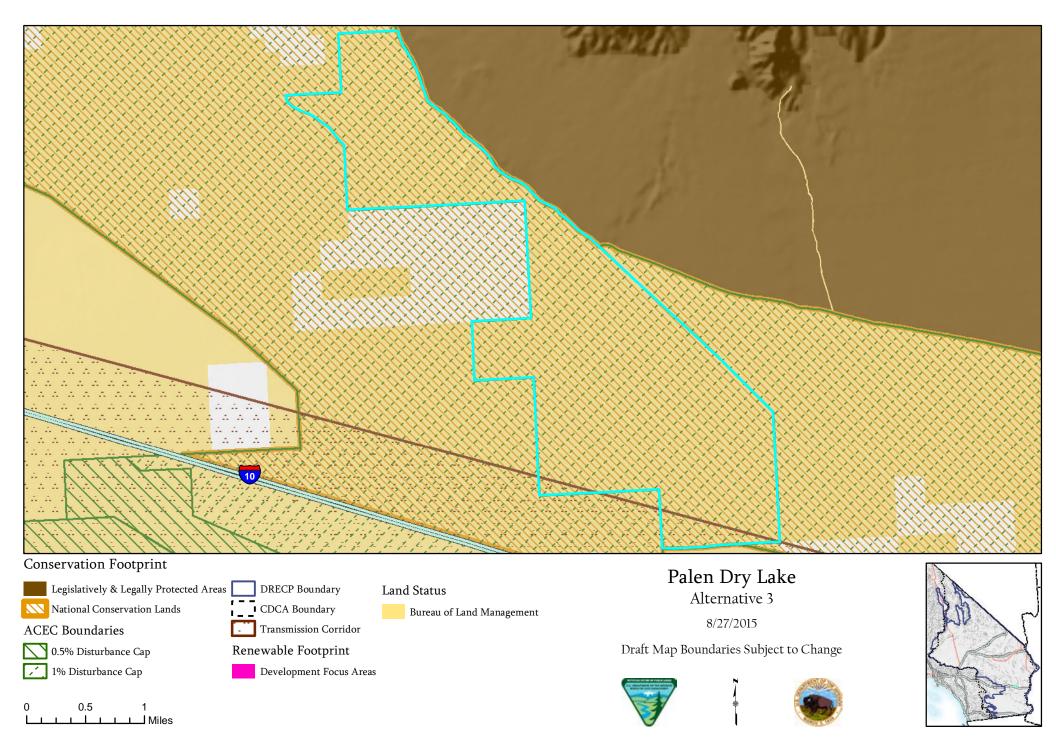
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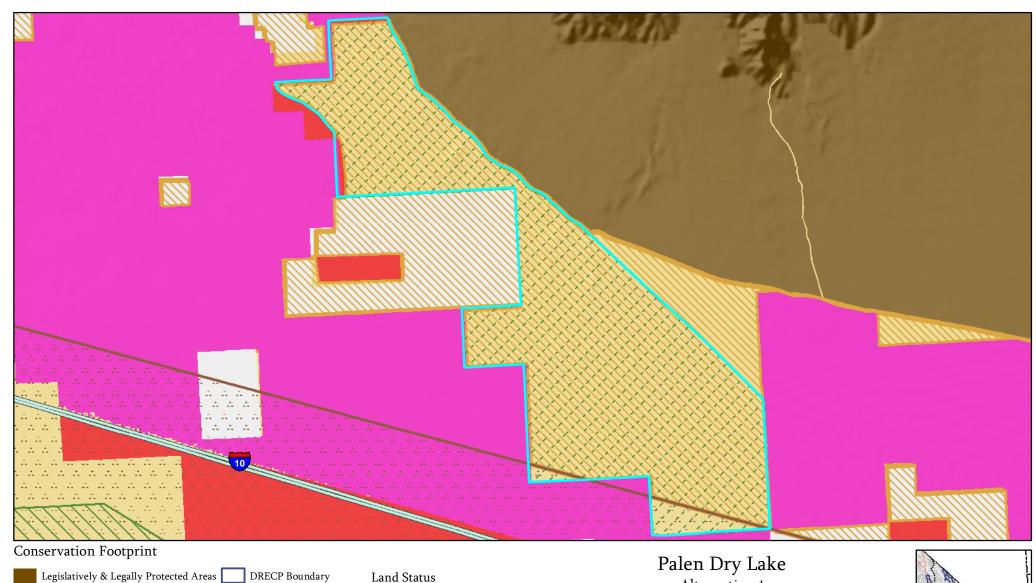












Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.5% Disturbance Cap

1% Disturbance Cap

# DRECP Boundary

CDCA Boundary

- Transmission Corridor

## Renewable Footprint

Development Focus Areas

Variance Lands

Alternative 4

8/27/2015

Draft Map Boundaries Subject to Change

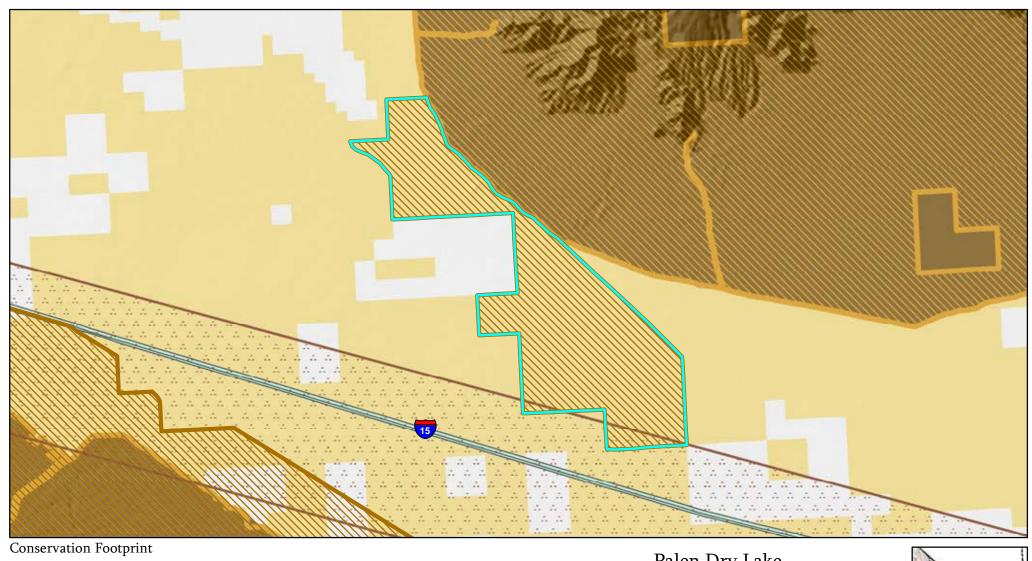


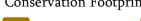






Bureau of Land Management







# Palen Dry Lake No Action

9/15/2015









#### **Palen-Ford Playa Dunes**

National Conservation Lands Ecoregion: Colorado Desert

#### **Description/Location:**

The proposed Palen-Ford Playa Dunes NLCS/ ACEC would encompass the entire playa and dune system in the Chuckwalla Valley of eastern Riverside County. The area is bordered on the east by the Palen-McCoy Wilderness, and on the west by Joshua Tree National Park. Included within its boundaries are the existing Desert Lily Preserve ACEC, the Palen Dry Lake ACEC, and the Palen-Ford Wildlife Habitat Management Area (WHMA).

#### **Nationally Significant Values:**

Ecological Values: The proposed unit would protect one of the major playa/dune systems of the California Desert. The area contains extensive and pristine habitat for the Mojave fringe-toed lizard, a BLM Sensitive Species and a California State Species of Special Concern. Because the Chuckwalla Valley population occurs at the southern distributional limit for the species, protection of this population is important for the conservation of the species. The proposed unit would protect an entire dune ecosystem for this and other dune-dwelling species, including essential habitat and ecological processes (i.e., sand source and sand transport systems). The proposed unit would also contribute to the overall linking of five currently isolated Wilderness Areas of northeastern Riverside County (i.e., Palen-McCoy, Big Maria Mountains, Little Maria Mountains, Riverside Mountains, and Rice Valley) with each other and Joshua Tree National Park, and would protect a large, intact representation of the lower Colorado Desert. Along with the proposed Chuckwalla Chemehuevi Tortoise Linkage NLCS/ ACEC and Upper McCoy NLCS/ ACEC, this unit would provide crucial habitat connectivity for key wildlife species including the federally threatened Agassizi's desert tortoise and the desert bighorn sheep. Protecting this proposed unit would be crucial for maintaining habitat connectivity between the Chuckwalla and Chemehuevi critical habitat units, the two main desert tortoise population centers in the Colorado Desert. The proposed unit also contains plant species and vegetation alliances that are associated with dune and playa systems, including several listed as rare/sensitive by the State of California.

**Cultural Values**: The proposed unit contains a large number of significant archeological sites that are associated with the lacustrine environment of Pleistocene Palen/ Ford Lakes, some of which are contained within the existing Palen Dry Lake ACEC. Disparate sources and collections of intermittent water have provided many small niches for plant and animal communities to survive providing resources for human populations. Major trail networks transit through the area and evidence from the trade and travel can be found throughout the valley. The dry lakes would seasonally or intermittently fill attracting waterfowl and humans for extended stays. Archaic times 2,000 to 8,000 years ago, likely experienced a different climate than today but newly discovered evidence of this early human occupation shows a significant presence dating back 10,000 years. A recent unpublished account of a Paleoindian fluted point, ca. 13,000 years old, was found near Ford Dry Lake.

**Scientific Values**: This proposed unit contains exemplary representation of pristine sand flow ecosystems and associated assemblages of sand flow ecosystem obligate species. The area represents outstanding opportunities for scientific research in ecosystem functionality, dispersion capacity as well as study of unique species only inhabiting these ecosystems. Significant opportunity also exists to study this system's response to disturbance and investigate resiliency to impact from large scale development as well as develop appropriate mitigation to maintain these ecosystems. Archaeological sensitivity is extremely high near the Dry lakes, benches, and washes. Preservation is exemplary in buried contexts, and on undisturbed desert pavements.

**Special Designations/Mgmt. Plan/Date:** Palen Dry Lake ACEC (1980), Desert Lily Preserve ACEC (1980), Palen-Ford Wildlife Habitat Management Area (NECO 2002).

#### **Relevance and Importance Criteria:**

**Biological**: The proposed unit would protect one of the major playa/dune systems of the California Desert. The area contains extensive and pristine habitat for the Mojave fringe-toed lizard, a BLM Sensitive Species and a California State Species of Special Concern. The proposed unit would protect an entire dune ecosystem for this and other dune-dwelling species, including essential habitat and ecological processes (i.e., sand source and sand transport systems). The proposed unit would also contribute to the overall linking of five currently isolated Wilderness Areas of northeastern Riverside County (i.e., Palen-McCoy, Big Maria Mountains, Little Maria Mountains, Riverside Mountains, and Rice Valley) with each other and Joshua Tree National Park, and would protect a large, intact representation of the lower Colorado Desert. The proposed unit also contains plant species and vegetation alliances that are associated with dune and playa systems, including several listed as rare/ sensitive by the State of California.

**Cultural**: The proposed unit contains a large number of significant archeological sites that are associated with the lacustrine environment of Pleistocene Palen/ Ford Lakes, some of which are contained within the existing Palen Dry Lake ACEC.

Recreation Area: This unit overlaps with the Chuckwalla SRMA.

**Lands with Wilderness Characteristics:** This unit contains 12,437 acres of lands that would be managed to protect wilderness character under the preferred alternative. The CMAs for lands managed to protect wilderness character would also apply in those areas.

#### **Overarching Goals:**

Maintain the integrity of essential fringe-toed lizard habitat and essential ecological processes (i.e., the sand transport system and sand sources).

Control invasive species on the sand dunes (e.g., tamarisk within the palo verde thickets, sahara mustard within the dunes/ fringe-toed lizard habitat)

Prevent excessive ground water withdrawal that would potentially threatened dune/ playa dependent vegetation alliances.

Provide for the protection of cultural resources associated with the Palen and Ford playas. Prohibit conflicting activities that may result in an adverse effect to National Register Eligible sites or artifacts, or landscapes.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

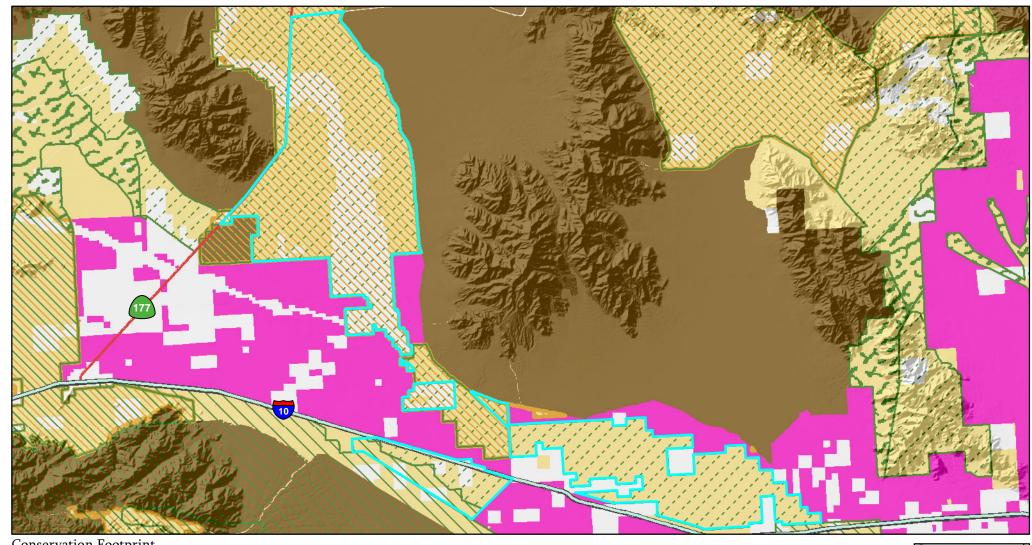
Designation and Acreage by Alternative:					
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap	
No Action	0	0	0	NA	
Preferred Alternative	21436	41,370	0	0.5%, 1%	
1	50,000	0	63,026	Wildlife Allocation	
2	20,700	20,700	0	0.25%	
3	58,800	62,800	0	0.5%, 1%	
4	17,700	17,700	0	0.25%	

<sup>\*</sup> Acreage values are for BLM managed lands

Object	ives (desired future conditions) /Allowable Uses, Management Actions	Resource Program
Objecti	ve: Protect the following special status plants and rare vegetation	Vegetation (incl. special
alliance	es by ensuring habitat is in a stable or improving condition.	status species)
Special	Status Species:	
1.	Foxtail cactus (Coryphantha alversonii) (NECO covered, CRPR 4)	
2.	Desert unicorn plant ( <i>Proboscidea althaeifolia</i> ) (NECO covered, CRPR 4)	
3.	Jackass clover (Wislizenia refracta ssp. palmeri) (NECO covered, CRPR	
	2)	
Rare V	egetation Alliances:	
1.	lodinebush Shrubland ( <i>Allenrolfea occidentalis</i> ) Shrubland Alliance	
2.	Spinescale Shrubland (Atriplex spinifera) Shrubland Alliance	
3.	Honey Mesquite Shrubland ( <i>Prosopis glandulosa</i> ) Shrubland Alliance	
4.	Bush Seepweed Shrubland (Suaeda moquinii) Shrubland Alliance	
5.	Big Galleta Herbaceous ( <i>Pleuraphis rigida</i> ) Herbaceous Alliance	
6.	Spectacle Fruit Herbaceous (Wislizenia refracta) Herbaceous Unique	
	Stands	
7.	Blue Paloverde- Desert Ironwood Woodland (Parkinsonia florida -	
	Olneya tesota) Woodland Alliance	
Manaa	ement Action: All surface disturbing activities must demonstrate a no	
_	s of the above special status plant species and vegetation alliances.	
Manao	ement Action: Establish a cooperative regional weed management area	
_	rol invasive species on the sand dunes (e.g., tamarisk within the palo	
verue t	hickets, sahara mustard within the dunes/ MFTL habitat).	

Management Action: Seek active scientific research regarding most	
appropriate methodologies to manage invasive species in sand dune	
ecosystems.	
Management Action: Prevent excessive ground water withdrawal that would	
potentially threatened dune/ playa dependent vegetation.	
Objective: Provide for the protections of special status animal species within	Fish and Wildlife (incl.
the NLCS area including:	special status species)
Mojave fringe-toed lizard	
2. Townsend's big-eared bat	
3. Pallid bat	
4. California leaf-nosed bat	
5. Prairie falcon	
6. Mountain plover	
7. Rosy boa	
8. Leconte's thrasher	
9. Mountain lion	
10. Burro deer	
11. Colorado Valley wood rat	
Management Action: Control invasive species on the sand dunes (e.g., control	
tamarisk within the palo verde thickets, control sahara mustard within the	
dunes/ MFTL habitat).	
Management Action: All surface disturbing activities must demonstrate a no	
net loss of habitats associated with the above special status animal species.	
Objective: Because of the proximity to Joshua Tree National Park, the area will	Visual Resources
be managed as VRM Class II. Some portions along the southern end managed	Visual Nesources
as Class III.	
Action: Prioritize restoration of all undesignated OHV routes to meet VRM	
class II objectives.	
Allocation:	Trails and Travel
OHV Limited to designated routes. There are no designated hiking trails at this	Management
time.	
Objective: Consolidate through tenure adjustment.	Land Tenure
Management Action: Acquire inholdings, edgeholdings and other interests	
from willing sellers.	
Objective: Protect resource values of the ACEC	Rights of Way (ROW)
Management Action 1: Land use authorization proposals (new, renewal, and	
amendment) will be analyzed on a case-by-case basis to assess whether they	
are compatible with the ACEC and its management goals.	
are companie with the Nozo and its management godis.	
Management Action 2: Lands with Wilderness Characteristics (LWC) within	
ACEC are ROW exclusion areas. Playas, dunes, mesquite bosques, desert	
chenopod scrub, and other rare vegetation alliances outside of LWC are ROW	
exclusion areas for all types of ROWs except energy transmission.	

No development	Renewable Energy
Objective: Maintain integrity of large blocks of habitat	
Allowable Uses: Not an allowable use. Renewable energy development is not compatible with NLCS and ACEC unit values and criteria	
Geothermal: ACECs are closed to geothermal leasing and development unless	
they overlap with a DFA where geothermal is allowed. Where there is overlap,	
ACECs are open to geothermal leasing with an NSO stipulation.	
Continue to allow mineral material disposals on a case by-case basis subject to	Locatable Minerals
site specific environmental analysis. Allow no disposal of mineral material in	Mineral Materials
Lands with Wilderness Characteristics.	Non-energy Leaseables
No-surface occupancy leasable minerals.	



# $\overline{\text{Conservation }}\overline{\text{Footprint}}$

Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

Miles

# Land Status

Bureau of Land Management

# Renewable Footprint

CDCA Boundary

Development Focus Areas

DRECP Boundary

# Palen Ford

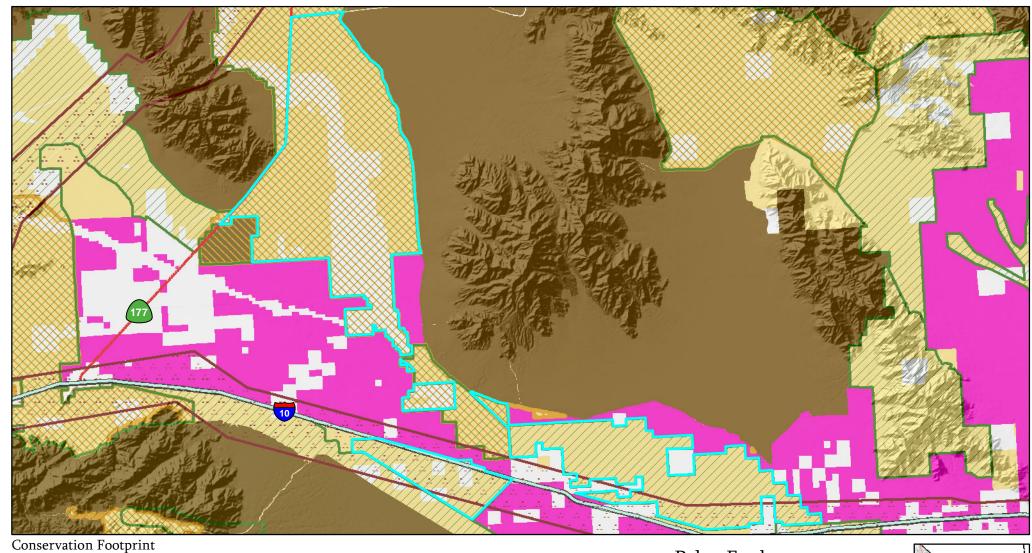
6/24/2015











Legislatively & Legally Protected Areas

National Conservation Lands

Proposed ACEC

DRECP Boundary
CDCA Boundary
Transmission Corridor
Renewable Footprint

Development Focus Areas

Bureau of Land Management

Land Status

# Palen Ford

7/14/2015 Draft Map Boundaries Subject to Change

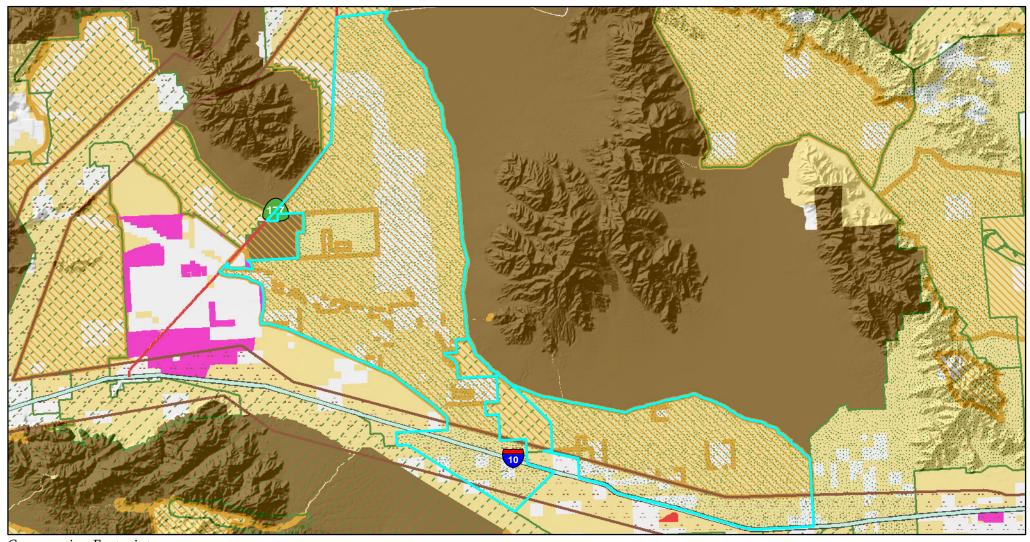








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Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation

U 2 4

# DRECP Boundary

Land Status

Bureau of Land Management

CDCA Boundary

- Transmission Corridor

# Renewable Footprint

Development Focus Areas

Variance Lands

# Palen Ford

Alternative 1

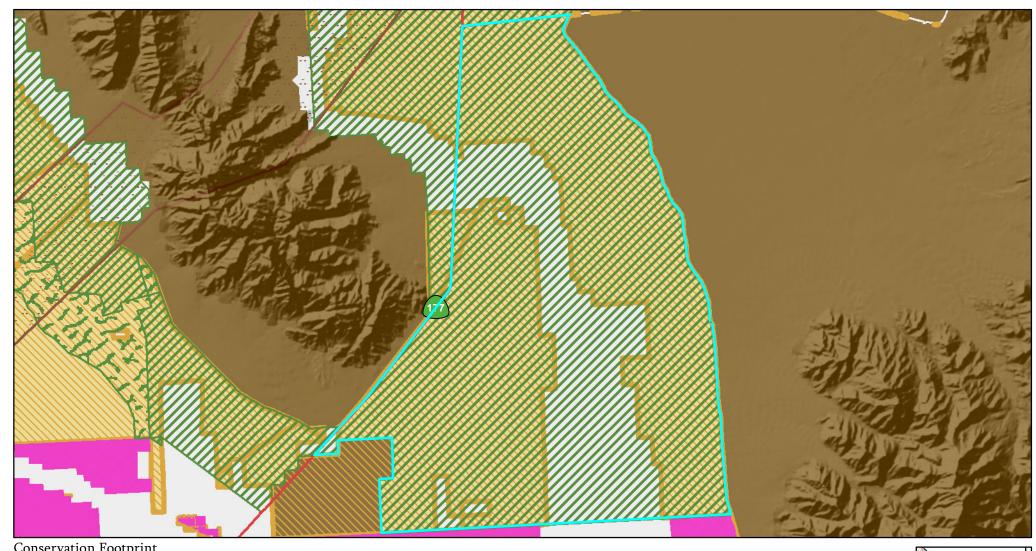
8/25/2015











Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.25% Disturbance Cap

# DRECP Boundary CDCA Boundary

- Transmission Corridor

Renewable Footprint

Development Focus Areas

## Land Status

Bureau of Land Management

# Palen Ford Alternative 2

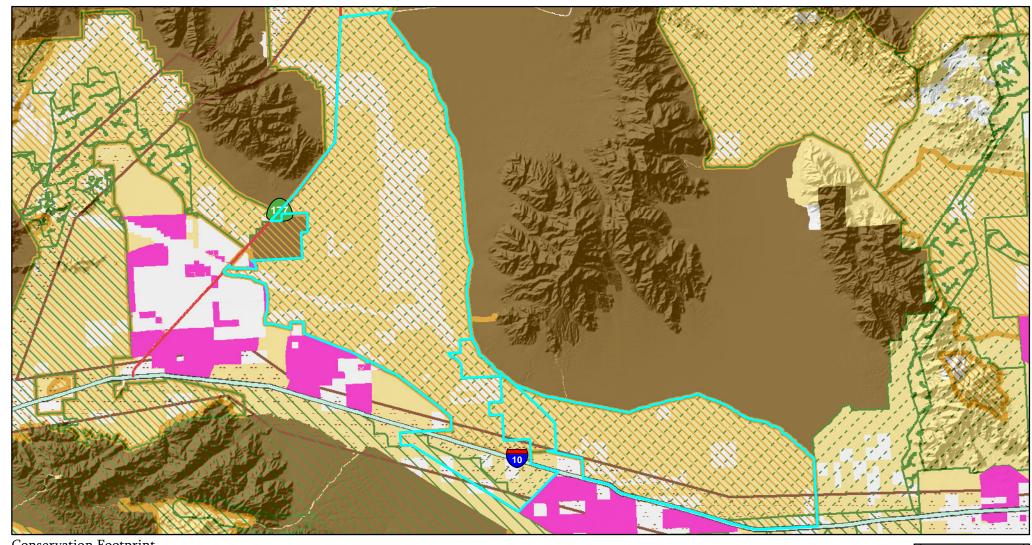
8/26/2015











Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap 0.5% Disturbance Cap

1% Disturbance Cap

Miles

# DRECP Boundary

CDCA Boundary

Transmission Corridor

Land Status

Bureau of Land Management

Renewable Footprint

Development Focus Areas

# Palen Ford Alternative 3

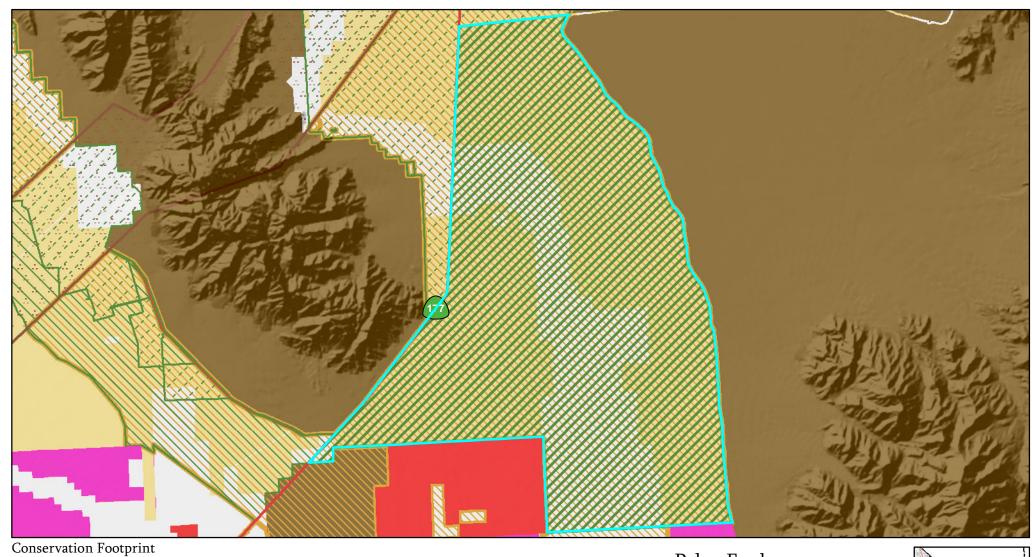
8/27/2015











Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap Miles

DRECP Boundary CDCA Boundary

- Transmission Corridor

Land Status

Bureau of Land Management

Renewable Footprint

Development Focus Areas

Variance Lands

# Palen Ford Alternative 4

8/27/2015









#### **Patton Military Camps**

National Conservation Lands Ecoregion: Colorado Desert

**Description/Location:** The Desert Training Center/California-Arizona Maneuver Area 1942-1944 is located within eastern California and western Arizona. The majority of the WWII training center is located in southeastern San Bernardino County, CA and eastern Riverside and Imperial Counties, CA.

### **Nationally Significant Values:**

#### **Cultural:**

The California-Arizona Maneuver Area (CAMA) was created in 1942 to train troops for the African, Pacific, and European campaigns. The harsh conditions of the American Deserts were considered similar in nature to North Africa where solders were being sent.

Thousands of men and boys from across the United States were sent to the following locations throughout the California Desert to prepare for duty in Africa. Victory in the sands of North Africa would play an important role in preventing the establishment of additional supply routes between Japan and Germany and shortening the length of WWII.

Desert Camps: Clipper (Divisional Camp), Coxcomb, Desert Center, Essex (Divisional Camp), Granite, Ibis (Divisional Camp), Iron Mountain (Divisional Camp), Needles (Divisional Camp), Pilot Knob, Rice (Divisional Camp), Young plus additional isolated unit campsites throughout the California Desert.

Associated Airfields: Shaver's Summit Airport, Desert Center Army Airfield, Essex Airfield, Needles Airport, Rice Army Airfield, Thermal Army Airfield and other miscellaneous landing strips.

Hospitals: Desert Center, Needles, Pilot Knob, Camp Young, and Yuma.

Quartermaster Depots: San Bernardino and Pomona, Desert Sites: Freda (Battalion Depot), Goffs (Regimental Depot), and Danby (Battalion Headquarters).

Railroad Sidings: Cadiz, Calipatria, Coachella, Colorado, Danby, Fenner, Freda, Glamis, Goffs, Ogilby, plus many additional transfer sites within western California and Central Arizona.

The heavy use of the California Desert for military maneuvers is evident in the extensive amount of tank tracks found on desert pavement surfaces.

The CAMA encompassed over 18,000 square miles of land from Pomona, CA to Phoenix, AZ south of the Mexican border, and as far north as Boulder City, NV. There were 10 divisional camps established within this area, Iron Mountain Division Camp being the most intact site today.

Resources remaining within the camp are acres of stone work lining the camp roads and walkways. Many rock designs of company symbols remain as well as special insignias. Many remnants from day-to-day camp life can be found such as communication wire, batteries, eating and cooking utensils, bottles, buckles and coins and most important the chapel and it's altar.

There are no known prehistoric or paleontological resources in the management area.

Special Designations/Management Plan/Date: Plan 52/1985

#### **Relevance and Importance Criteria:**

Camp Iron Mountain is one of the most significant and best preserved remnants of the WWII historical period. It has been nominated for the National Register of Historic Places. This area was designated in recognition of the cultural values.

Recreation Area: This unit overlaps with the National Trail SRMA and the Ward Valley ERMA.

**Grazing Allotment**: This unit overlaps with the Rice Valley allotment.

**Lands with Wilderness Characteristics:** This unit contains 6 acres of lands that would be managed to protect wilderness character under the preferred alternative. The CMAs for lands managed to protect wilderness character would also apply in those areas.

**Overarching Goals:** To protect and interpret the historic resources and value of the site.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

#### **Designation and Acreage by Alternative:**

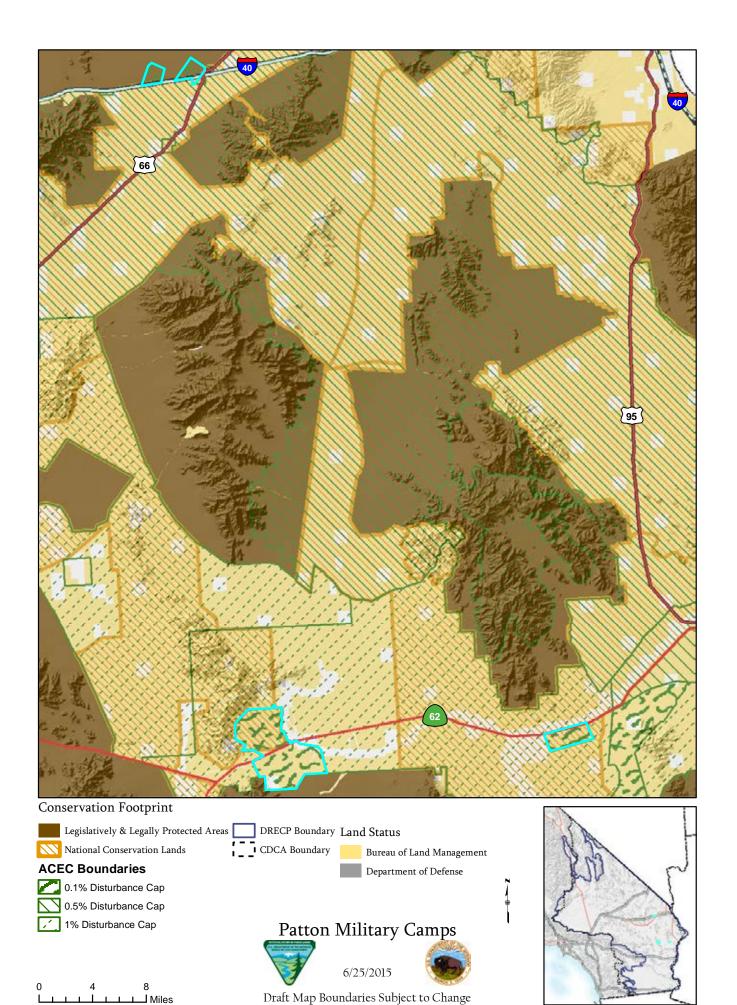
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	3,800	0	NA
Preferred Alternative	9,257	16,455	0	0.10%
1	0	26,000	0	0.10%
2	19,200	19,200	0	0.10%
3	7,500	18,300	0	0.10%
4	2,500	18,300	0	0.10%

<sup>\*</sup> Acreage values are for BLM managed lands

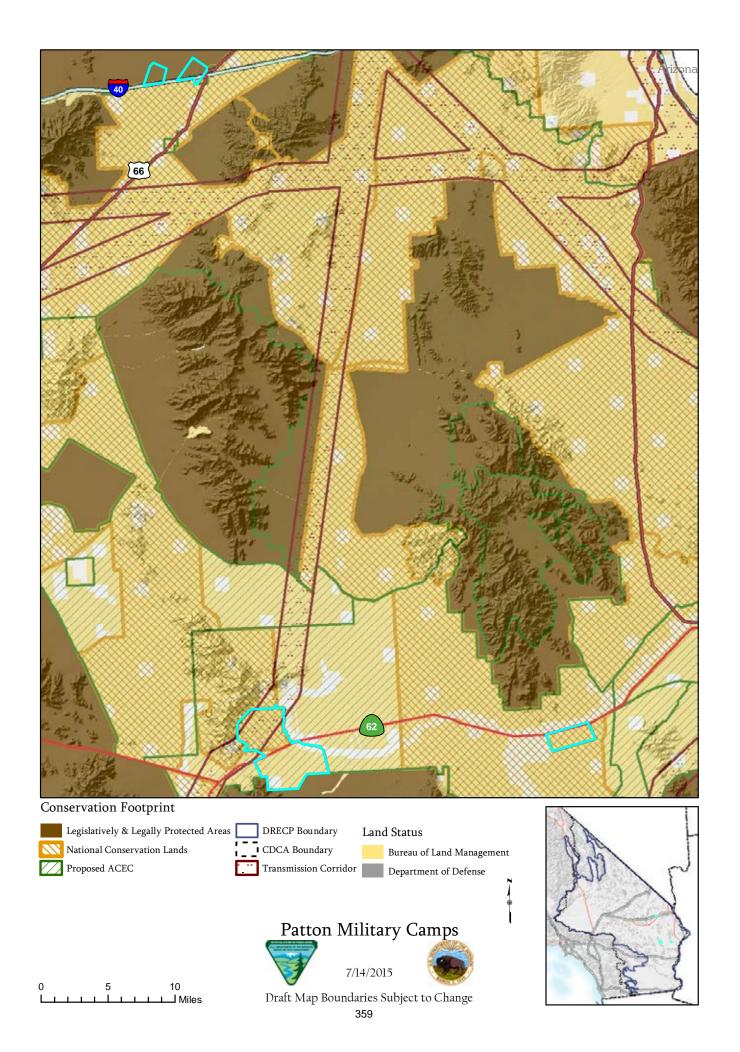
Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
	Cultural Resources
Objective: General Management of Cultural Resources	
Action Item 1: Ensure that management of cultural resources within the ACEC	
are consistent with agency responsibilities provided in Section 110 of the	
National Historic Preservation Act (NHPA).	
Action Item 2: Ensure that federal actions that may affect historic properties	
within the ACEC are properly reviewed and considered consistent with the	
requirements of Section 106 of the NHPA.	
Action Item 3: Ensure confidentiality of information about sensitive cultural	
resources consistent with Section 304 of the NHPA and Section 9 of the	
Archaeological Resources Protection Act.	
Objective: Establish Baseline Resource Information/Identify and Document	
Cultural Resources	
Action Item 1: Survey, identify and record new cultural resources within the	
ACEC boundaries.	
Action Item 2: Update records for existing cultural resources within the ACEC.	
Action Item 3: Integrate survey information into BLM cultural resources	
management systems (cultural GIS geodatabase)	
Objective: Evaluate and Nominate Cultural Resources	
Action Item 1: Utilizing the eligibility criteria of the National Register of Historic	
Places, complete an evaluation of all cultural resources in the ACEC for	
eligibility either as an individual historic property or determine whether there	
significant resources might comprise a district.	
Action Item 2: Complete nominations to the National Register of Historic	
Places for significant historic properties.	
Objective: Identify Threats to Cultural Resources	
Action Item 1: Develop baseline assessment of specific natural and man-made	
threats to cultural resources in the ACEC (i.e., erosion, looting and vandalism,	
grazing, OHV).	
Objective: Monitoring/Protective Measures	
Action Item 1: Provide on-going monitoring for cultural resources based on the	
threat assessment.	
Action Item 2: Identify, develop or incorporate standard protection measures	
and best management practices to address threats.	
Action Item 2: Where specific threats are identified, implement protection	
measures consistent with agency Section 106 responsibilities.	
Objective: Interpretation/Public Awareness	
Action Item 1: Facilitate research, scientific study, and general study of cultural	
resources within the ACEC.	
Action Item 2: Where appropriate and with consideration of site protection	
and confidentiality, develop and provide interpretation to the public about	
cultural resources, including signs, interpretive panels, web-based information.	

Objective: Stabilize, protect, and maintain the historic resources in the condition of "arrested decay"  Action: Extend vehicle enclosure fence to the entire length of the camp	
Action. Extend vernole enclosure reflec to the entire length of the camp	
Provide additional information requested to complete nomination in the National Register of Historic Places	
Re-grade and maintain existing berm on the northwest slope of the camp	
Goal: Provide for the use of a designated system of roads and trails to ensure	Trails and Travel
access to the public for appropriate uses.	Management
Action:	
<ul> <li>All legal open roads and trails will be signed including road or trail number/name.</li> </ul>	
All roads and trails identified as closed will be rehabilitated/restored.	
Restore all undesignated roads or trails.	
Provide routine maintenance of the designated roads and trails system     including installation of routing signs, regulars, subjects disables, water	
including installation of routine signs, markers, culverts, ditches, water bars, barriers, gates, or cattle guards on/or adjacent to system roads and	
trails.	
<ul> <li>Goal: Manage recreation consistent with established conservation goals, while providing a broad range of recreation opportunities, and to ensure public health and safety;</li> <li>Action: <ul> <li>Provide interpretive, directional, and regulatory signs and materials as necessary to provide public information and reduce impacts from recreational use.</li> <li>Prohibit competitive special recreation events.</li> <li>Allow stopping and parking within 25 feet, and camping within 100 feet of designated routes.</li> <li>Manage recreational shooting consistent with state and local laws.</li> <li>Issuance of Special Recreation Permits for day use or overnight use up to 14 consecutive nights; that impact no more than 3 staging area acres; and/or for recreational travel along roads and trails designated open in the land use or accompanying activity level plans.</li> </ul> </li> </ul>	Recreation
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.*	Land Tenure
* Procedures will be completed to acquire an easement from the Metropolitan Water District across the transmission line corridor.	

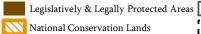
Objective: Protect resource values of the ACEC Management Action: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.	Rights of Way
No Renewable Energy Development  Geothermal: ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	Renewable Energy
Allowable Uses: Existing allotment is authorized, but do not authorize new allotments or expansion of existing allotment (either in size or increase number of AUMs), if willing relinquishment, would be made unavailable	Livestock grazing



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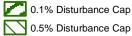


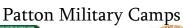
CDCA Boundary

Bureau of Land Management

Department of Defense

#### **ACEC Boundaries**



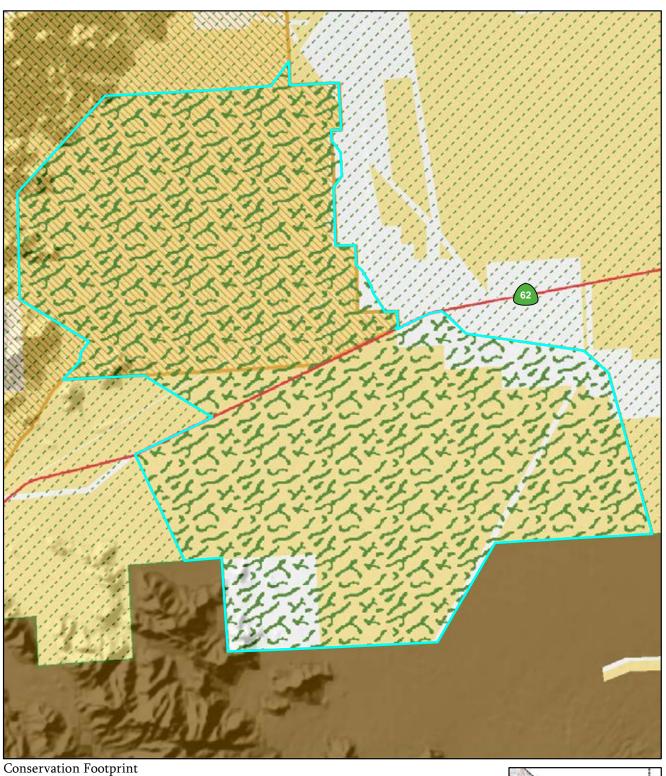




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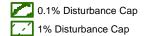


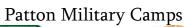






#### **ACEC Boundaries**

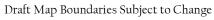




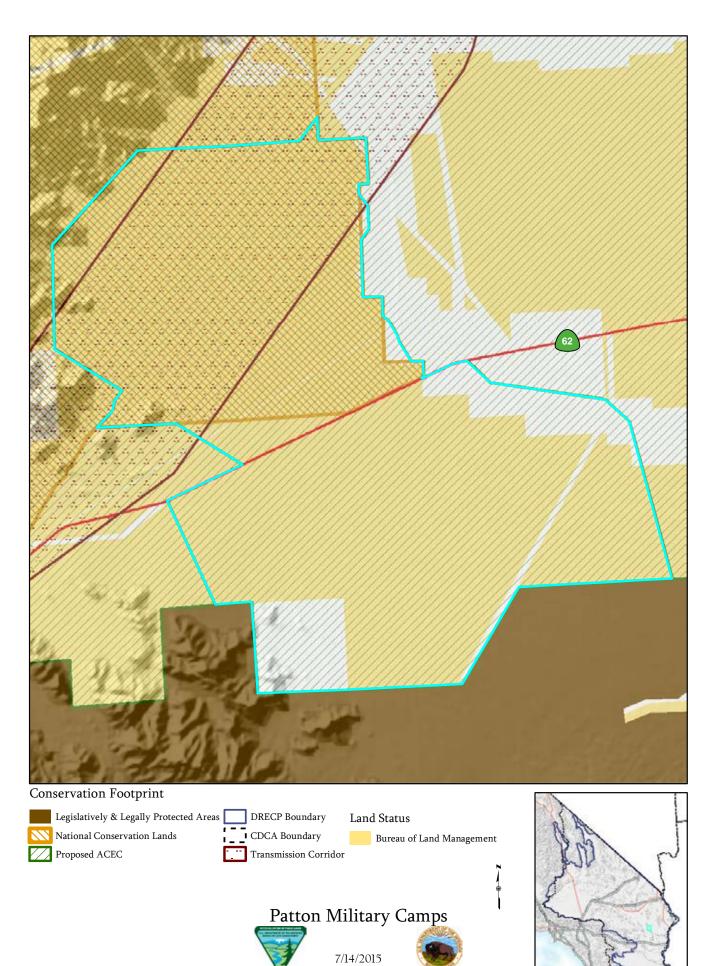


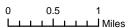
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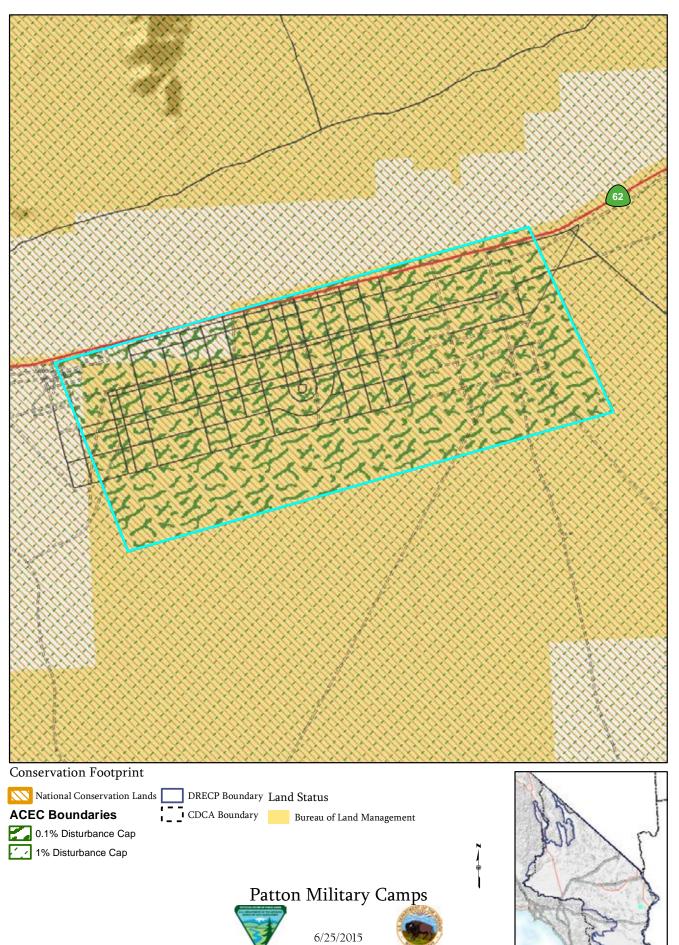


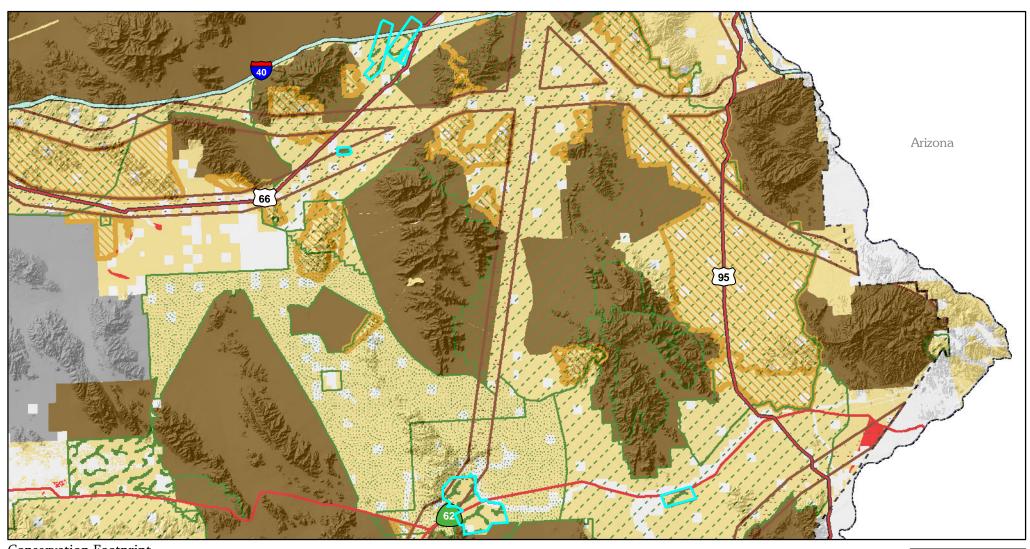












Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation

16 

## DRECP Boundary

CDCA Boundary Transmission Corridor

Bureau of Land Management Department of Defense

Land Status

### Renewable Footprint

Variance Lands

## Patton Military Camps Alternative 1

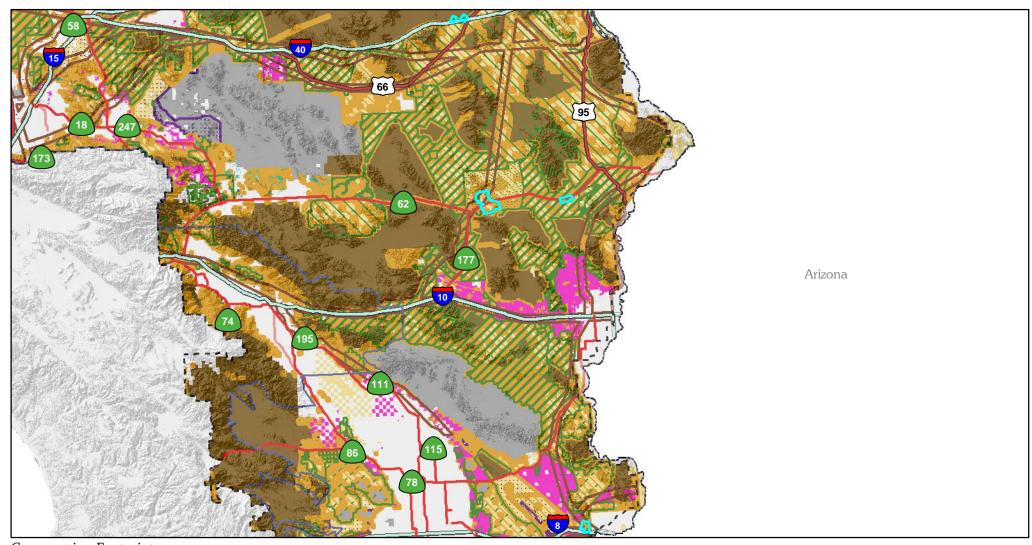
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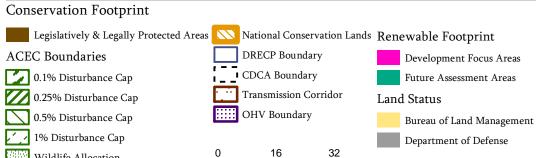












Miles لــــــ

Wildlife Allocation

## Patton Military Camps Alternative 2

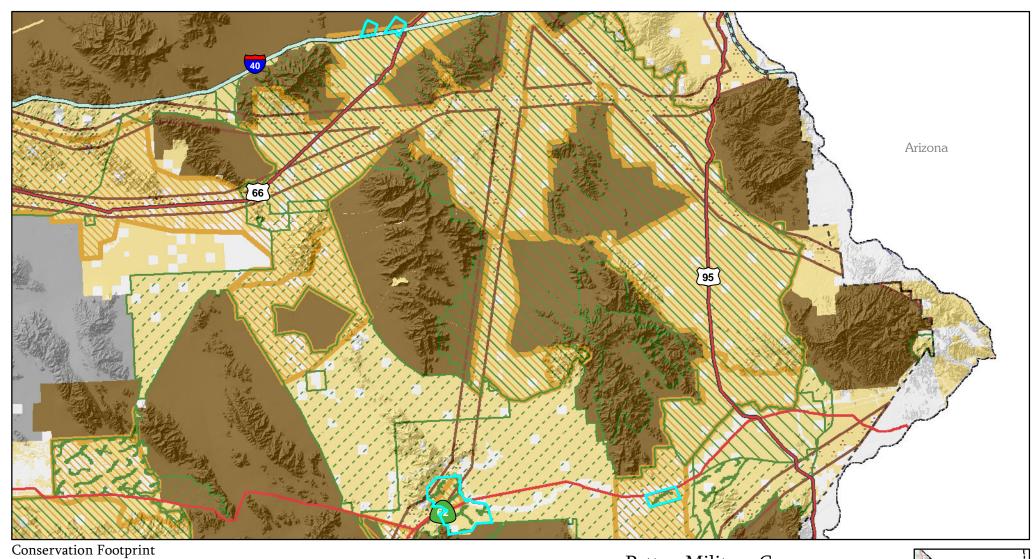
8/26/2015













Legislatively & Legally Protected Areas National Conservation Lands

DRECP Boundary

Transmission Corridor

CDCA Boundary

Land Status

Bureau of Land Management

Department of Defense

**ACEC Boundaries** 

0.1% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

LIIII Miles

## Patton Military Camps

Alternative 3

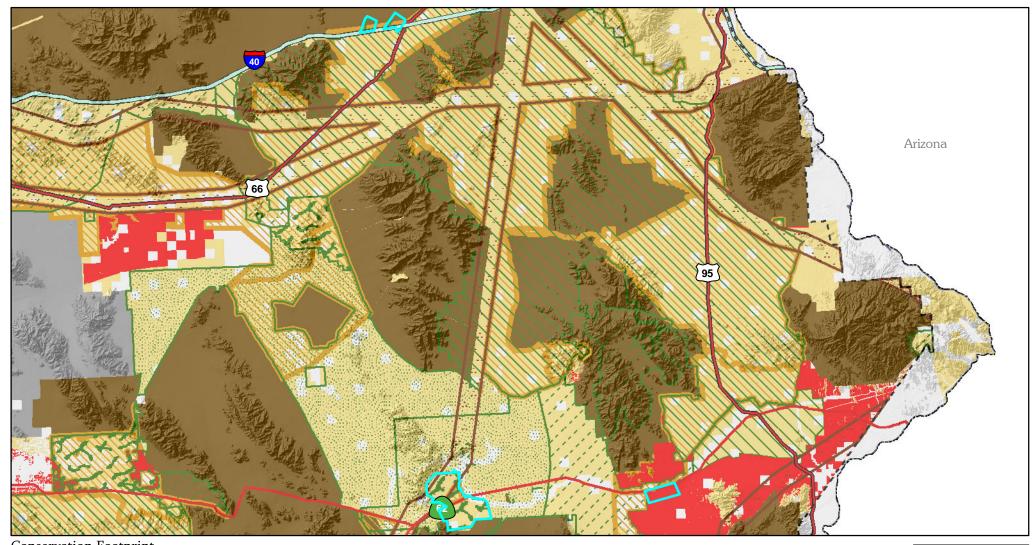
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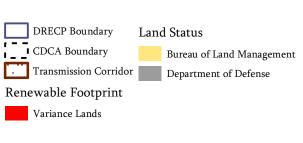
**ACEC Boundaries** 

0.1% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation



## Patton Military Camps

Alternative 4

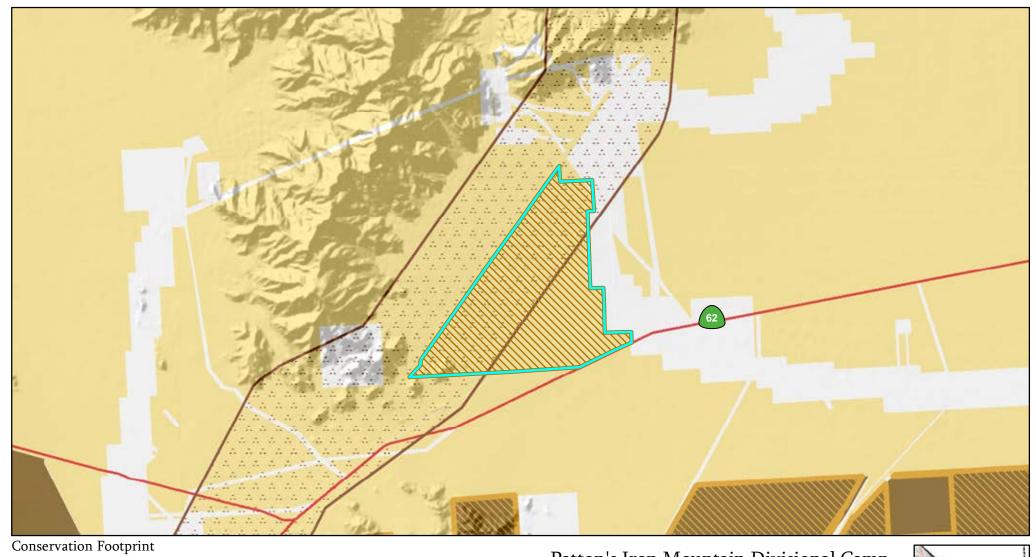
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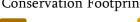


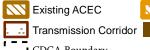














## Patton's Iron Mountain Divisional Camp No Action

9/15/2015









#### **Picacho**

National Conservation Lands Ecoregion: Colorado Desert and Lake Cahuilla

**Description/Location:** This proposed ACEC and NLCS lands are located east of Ogilby Road in Imperial County, north of the Quechan Indian Reservation. It encompasses the Picacho general region, including the Cargo Muchacho Mountains, Buzzards Peak and the Vinagre Wash area.

#### **Nationally Significant Values:**

**Cultural:** These conservation lands and this unit contain nationally significant prehistoric cultural resources including habitation sites, geoglyphs, trails, and areas of sacred value to the local Native American tribes. Other historic properties (properties eligible for or listed in the National Register of Historic Places [NRHP]), within these lands include the Tumco/Hedges historic gold mining districts and the Quechan Area of Traditional Cultural Concern. The proposed conservation lands link and protect a vast and significant cultural landscape important to many tribes, from the Cargo Muchacho Mountains and Colorado River up through related landscapes in the Colorado Desert subarea through Joshua Tree National Park and into the Mojave Desert.

**Ecological:** The unit's lands contain critical habitat for desert tortoise populations in the southern portion of their range and is essential for maintaining connectivity. The unit also contains areas with a combination of meteorological, geological, hydrological, topographical features that have been identified as important climate refugia (slow/minimized climate changes) for wildlife species. These conservation lands provide an unbroken linkage between eight wilderness areas in three subareas, and connect these lands from the Colorado River to Joshua Tree National Park and into the Mojave Desert.

**Scientific:** Numerous prehistoric and historic archaeological sites located within this area contain significant information values that would inform our understanding and knowledge of the past.

**Special Designations/Management Plan/Date:** No previous special designation.

#### **Relevance and Importance Criteria**

The ACEC serves as an outstanding representative of the Sonoran Desert with a full complement of the characteristic wildlife and plant species. The unit also contains areas with a combination of meteorological, geological, hydrological, topographical features that have been identified as important climate refugia (slow/minimized climate changes) for wildlife species. The ACEC provides unique opportunity for multiple use management- aside from its rich wildlife and botanical resources; it has been utilized extensively for outdoor recreation. The area is also essential for other important wildlife species including Bighorn Sheep and Mule Deer and includes important movement corridors for these species. These corridors provide wildlife the ability to disperse across long distances in order to connect different habitat and populations. Additionally, the area supports several species of bats and birds.

**Lands with Wilderness Characteristics:** This unit contains 17,618 acres of lands that would be managed to protect wilderness character under the preferred alternative. The CMAs for lands managed to protect wilderness character would also apply in those areas.

**Overarching Goals:** To enhance, protect and preserve the cultural and biological resources while providing compatible recreational opportunities. To maintain desert tortoise habitat connectivity between the Chuckwalla Desert Wildlife Management/Area of Critical Environmental Concern/ Critical Habitat Units and high value climate refugia for wildlife.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

#### **Designation and Acreage by Alternative:**

Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	0	0	NA
Preferred Alternative	182,962	184,542	0	0.5%, 1%
1	90,400	0	197,800	Wildlife Allocation
2	139,600	140,300	0	0.5%, 1%
3	182,500	184,100	0	0.5%, 1%
4	49,600	0	50,300	Wildlife Allocation

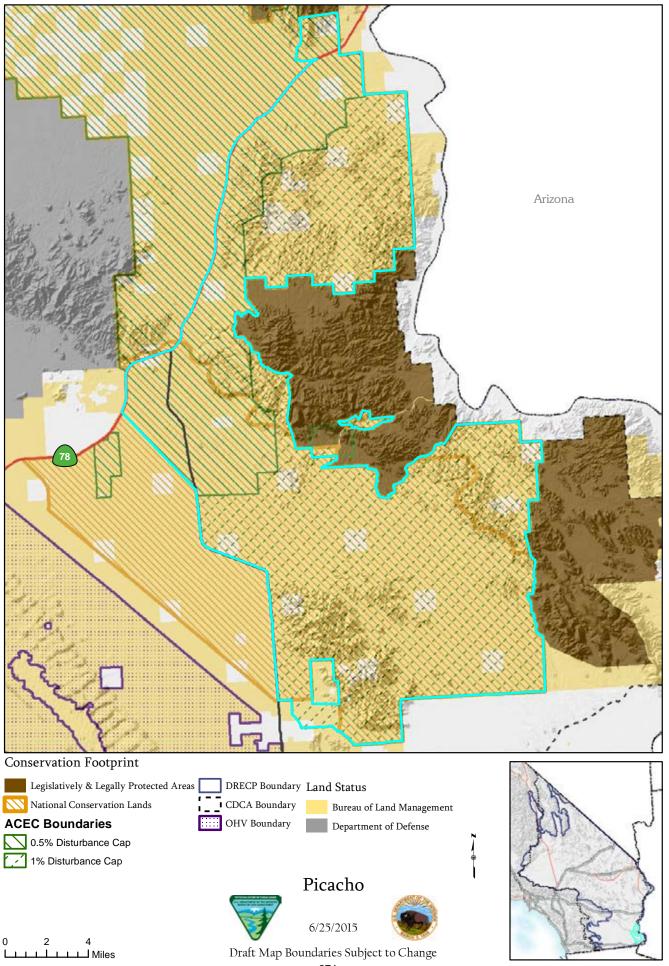
<sup>\*</sup> Acreage values are for BLM managed lands

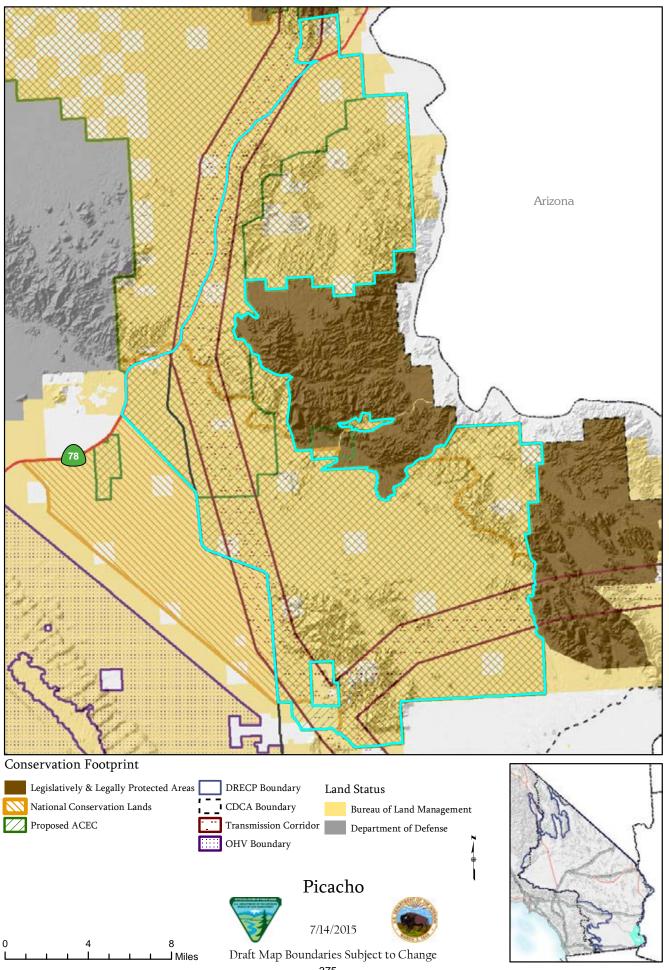
Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
Objective: Minimize soil disturbance.	Soil, water, air
Objective: Manage the ACEC with the standards for CO, H2S, visibility-reducing particles, and attainment for other criteria in accordance with the standards set by the Imperial County Air Pollution Control District.	
Management Actions: Coordinate with the Imperial County Air Pollution Control District.	
Objective: Protect and enhance robust populations of both rare and common native plants. Unique plant assemblages exist within this ACEC including mesquite and all thorn assemblages.	Vegetation (incl. special status species)
Management Action: Manage vehicular traffic to stay on designated OHV routes.	
Management Action: Place signs, kiosks and interpretive information at key	

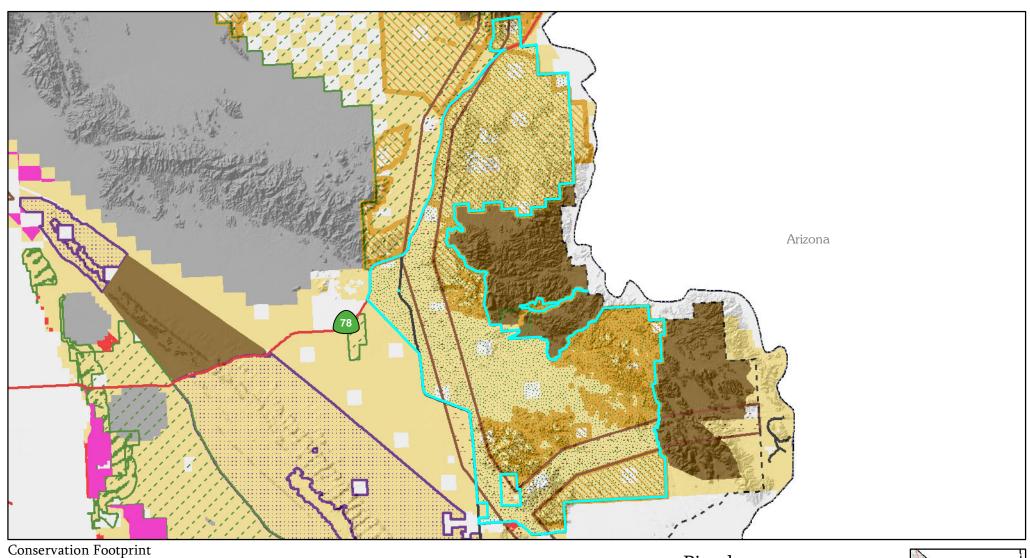
recreational sites to better inform the public about the important plant	
resources.	
Management Action: Eradicate and control the spread of invasive and noxious	
weeds.	
Objective: Create a baseline of plant species to track environmental changes.	
Management Action: Inventory vascular and non-vascular plants, include soil	
crust species, in the ACEC.	
Objective: Maintain and enhance habitat that supports native wildlife; Desert	Fish and Wildlife (incl.
Tortoise, Mule Deer, Bighorn Sheep.	special status species)
Management Action: Monitor wildlife for habitat and population change.	the construction of the construction
Management Action: Allow construction of wildlife waters as appropriate.	
Objectives Reduce wild burre populations to appropriate management levels	
Objective: Reduce wild burro populations to appropriate management levels to maintain wildlife habitat in the ACEC.	
Management Action: Conduct periodic removal of wild burros.	
Objective: Manage landscape to ensure wildlife passage and connectivity	
between wildlife populations.	
<b>Objective 1</b> : Protect biodiversity and manage for resilience (protect climate	Climate Change and
refugia and provide for migration corridors).	Adaptation
Management Action 1: Prioritize habitat enhancement in areas expected to	
provide for the greatest level of resiliency (good response or rehabilitation	
results after significant disturbance such as fire) and or resistance to change	
(e.g. climate refugia).	
Management Action 2: Consider actions that enhance the primary productivity	
of climate refugia with native species restoration, reduced soil surface	
disturbance, and habitat infrastructure to increase carrying capacity of refugia (e.g., wetland, oasis).	
(e.g., wetland, basis).	
Management Action 3: Maintain migration corridor integrity by minimizing	
obstructions (fences, roads), disturbances (limiting access to water and shade	
during peak temperatures) and habitat fragmentation.	
Objective 2: Maintain and or enhance key ecosystem processes (e.g., carbon	
sequestration, water residence time) and prepare and respond to significant	
disturbances to the environment (e.g. floods).	
Management Action 1: Develop proactive and responsive management	
actions for potentially dangerous and damaging disturbances to the	
environment, which are exacerbated by climate change (e.g. wildfire, flash	
floods, etc.).	
Managament Action 2. Minimize course tration leaves from	
Management Action 2: Minimize carbon sequestration losses from	
management activities by reducing impacts to vegetation, soil structure and	
soil biota.	

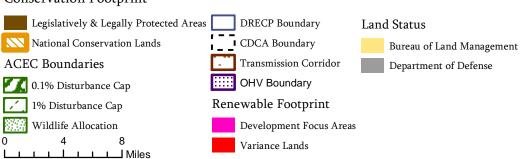
Management Action 3: Leverage disturbance events and other landscape changes, when possible, as opportunities to assess climate adaptation actions. For example, revegetation objectives for projected climate scenarios benefiting multiple ecosystem services (habitat and carbon sequestration objectives).	
See programmatic ACEC cultural resources objective and action items in general cultural resources rules.	Cultural Resources
Objective: Provide for the protection of highly sensitive cultural resources.  Management Action: Perform route restoration to erase illegal routes.  Management Action: Monitor the creation of illegal routes and perform route restoration as needed.	
Management Action: Conduct patrols and surveillance.  Management Action: Manage vehicular traffic to stay on designated OHV Routes.	
Management Action: Nominate the significant sites or potential districts to the NRHP.	
Management Action: Consult with local Indian tribes and knowledgeable traditional practitioners regarding the cultural resource values present within the ACEC.	
Objective: Increase public awareness of the cultural resources values within the ACEC.	
Management Action: Install informative signage and kiosks at various appropriate locations within the ACEC.	
Objective: Manage the route of travel network to fulfill requirements of the original CDCA Plan and the NECO Plan Amendment.	Trails and Travel
Management Action: Provide signage and maps to the public to inform them of route locations and regulations.	Management
Management Action: Increase patrols and other BLM personnel visits to the area, as needed to improve compliance with resource protection	
Management Action: Monitor the creation of illegal routes and perform route restoration as needed.	
Objective: Promote dispersed recreational activities in this area which would include (but is not limited to) sight-seeing, camping, hunting, target shooting, hiking, rock collecting, and 4x4 touring.	Recreation
Objective: Encourage compliance with ACEC management recommendations Management Action: Increase patrols and other BLM personnel visits to the area as needed to improve compliance with resource protections Management Action: Provide signage and maps to the public to inform them of route locations and regulations.	
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure

Objective: Protect resource values of the ACEC	Rights of Way
Management Action 1: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.  Management Action 2: Limit energy transmission line ROWs to designated utility corridors.	
Not available for renewable energy. <b>Geothermal:</b> ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	Renewable Energy
Objective: Review certain proposed mining activities to ensure that they provide adequate protection of public lands and their resources.	Locatable Minerals Mineral Materials Non-Energy Leasables
Allowable Uses: Mining activities would be allowed with appropriate analysis, stipulations, and mitigation. There are currently some active mining claims and proposal for mineral exploration beyond casual use in the area. There is also one active and one proposed sand and gravel operation within the former American Girl Mine.	
Management Actions:  New mining claims will be allowed within the ACEC. However, proposals for active mining operations beyond casual use will need to be analyzed on a case-by-case basis, to assess whether they can be accommodated within the Picacho ACEC and its management goals.	
Allowable Uses: This ACEC would continue to be used for training maneuvers for the military including practice landing and take-off of a helicopter or other aircraft at remote locations on public lands that are not critical habitat or contain sensitive cultural resources (reference Instruction Memorandum No. 2001-030).	Military Use









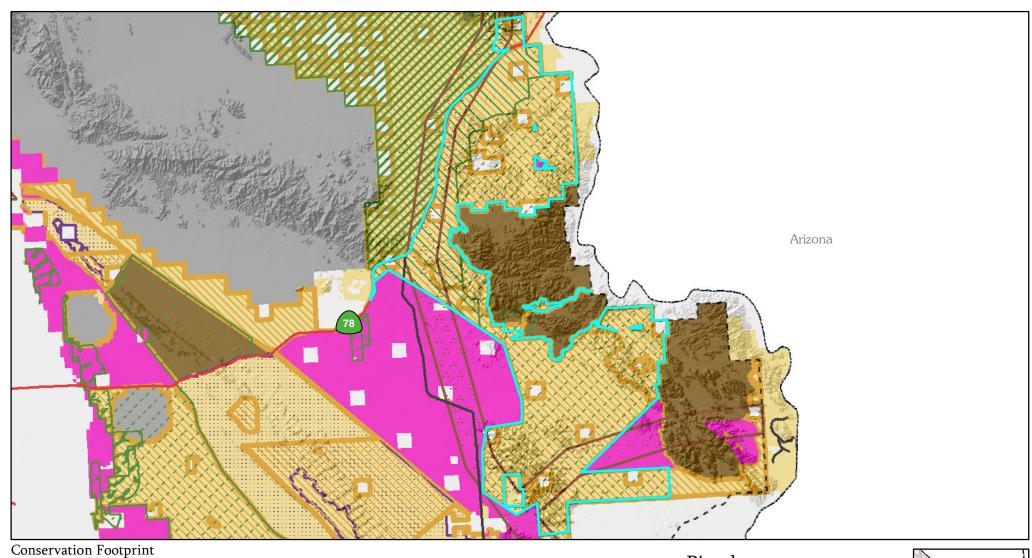
Picacho Alternative 1 8/25/2015

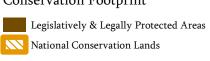












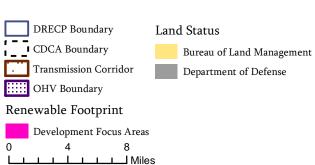
**ACEC** Boundaries

0.1% Disturbance Cap

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap



## Picacho Alternative 2

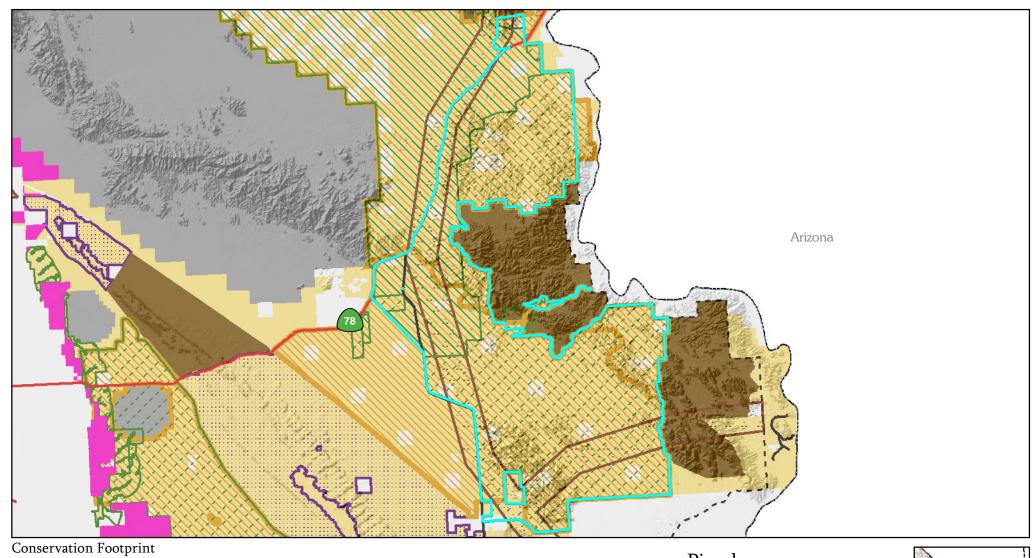
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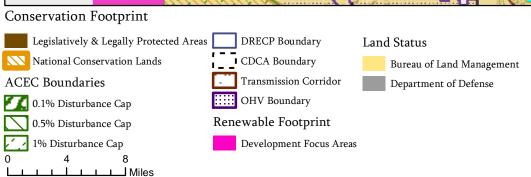


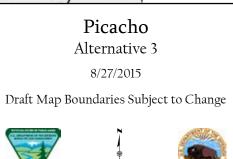








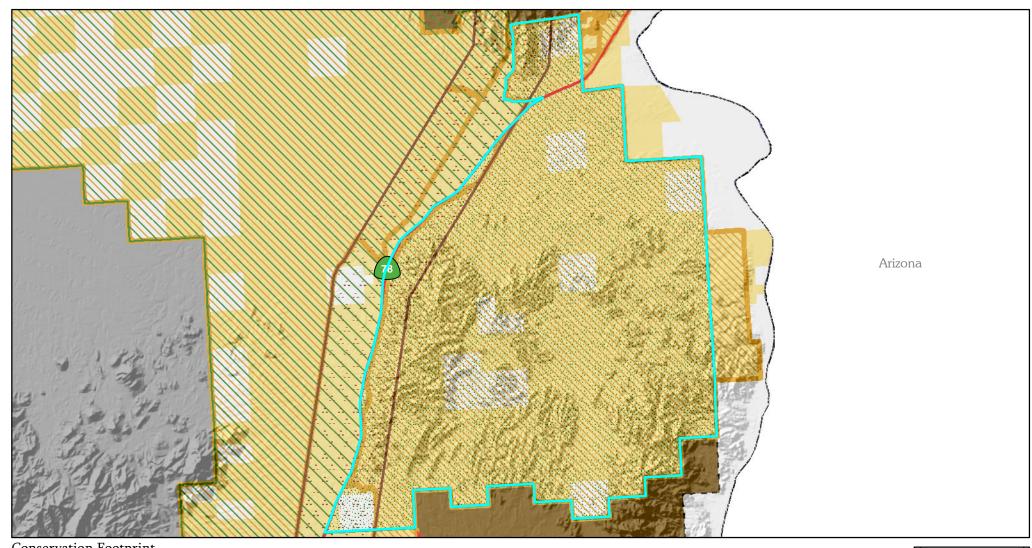


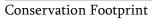












Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.5% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation

0 2 4 L 1 1 Miles

## DRECP Boundary Land Status

CDCA Boundary

Bureau of Land Management

Transmission Corridor

Department of Defense

Renewable Footprint

Variance Lands

## Picacho

Alternative 4

8/27/2015









#### **Upper McCoy**

National Conservation Lands Ecoregion: Colorado Desert

#### **Description/Location:**

The Upper McCoy area is bordered on three sides by the Palen-McCoy Wilderness. The area is currently managed as the Upper McCoy Multi-species Wildlife Habitat Management Area (WHMA) and as a Bighorn Sheep WHMA under the Northern and Eastern Colorado Desert Coordinated Management (NECO) Plan.

#### **Nationally Significant Values:**

Ecological: The proposed unit is a vast and remote area, surrounded on three sides by the Palen-McCoy Wilderness. It is the watershed for the Midland Ironwood Forest, which is a significant feature of the Palen-McCoy Wilderness. The area also contains the Palen Pass Huge Ironwood Trees, an Unusual Plant Assemblage (UPA) that was identified in the 1980 California Desert Conservation Area Plan. The Midland Ironwood Forest, along with the Palen Pass Huge Ironwood Trees UPA, comprises one of the largest ironwood woodlands in the Sonoran Desert, both in terms of the extent of the woodland and the size of the individual trees. The proposed NLCS unit would contribute to the overall linking of five currently isolated Wilderness Areas of northeastern Riverside County (i.e., Palen-McCoy, Big Maria Mountains, Little Maria Mountains, Riverside Mountains, and Rice Valley wildernesses) with each other and Joshua Tree National Park, and would protect a large, intact representation of the lower Colorado Desert. Along with the proposed Chuckwalla Chemehuevi Tortoise Linkage NLCS/ ACEC and Palen-Ford NLCS/ ACEC, this unit would provide crucial habitat connectivity for key wildlife species including the federally threatened Agassizi's desert tortoise and the desert bighorn sheep. Protecting this proposed NLCS unit would be crucial for maintaining habitat connectivity between the Chuckwalla and Chemehuevi critical habitat units, the two main desert tortoise population centers in the Colorado Desert. Some areas within the ACEC provide a combination of meteorological, geological, hydrological, topographical features that have been identified as important climate refugia (slow/minimized climate changes) for wildlife species.

**Cultural**: The military used this area between narrowly separated mountain ranges heavily during WWII as part of the Desert Training Center. The area features numerous historic archaeological sites, features, and very likely unexploded ordnance as well. Water sources in natural tanks along the flanks of the Mountains are likely the reasons for the existence of prehistoric archaeological sites including petroglyphs, cleared circles, pot drops, groundstone artifacts, and trail segments. Due to the dearth of previous archaeological investigations in the area the current level of knowledge of the prehistoric past is lacking with regard to the amount of preserved sites known.

**Scientific Values**: The rich archaeological deposits have the potential to reveal much about the lives of aboriginal peoples, previous climate patterns, and early environments of the late prehistoric era back to the late Pleistocene. The potential for Pleistocene paleontological discoveries has been elevated recently due to discoveries from nearby investigations.

**Special Designations/ Management Plan/ Date:** Newly proposed unit with the following previous designations Palen Pass Huge Ironwood Trees Unusual Plant Assemblage (CDCA Plan 1980), Upper McCoy Wildlife Habitat Management Area (NECO 2002)

#### **Relevant and Importance Criteria:**

The proposed ACEC is in an area of higher value desert tortoise habitat in northeastern Riverside County. It

would provide critical desert tortoise habitat connectivity between the two major desert tortoise populations identified in the Colorado Desert (e.g., the Chuckwalla and Chemehuevi populations). The area contains the Palen Pass Huge Ironwood Trees, which comprise an Unusual Plant Assemblage (UPA) identified in the 1980 California Desert Conservation Area Plan. The area contains bighorn sheep demes and corridors (demes and corridors in the Granite, Palen, and Little Maria mountains). This vast area is surrounded on three sides by Wilderness, giving it a remote and pristine feel. It is the watershed for the Midland Ironwood Forest within the Palen-McCoy Wilderness. The Palen Pass Huge Ironwood Trees are one of the largest ironwood woodlands in the Sonoran Desert, both in terms of the extent of the woodlands and the size of the individual.

**Overarching Goals**: Maintain bighorn sheep demes and corridors. Bighorn Sheep management goals and objectives are described in Section 2.3.1 in the NECO Plan; Protect higher value desert tortoise habitat and ensure that desert tortoise connectivity is maintained; Protect the watershed for the Palen Pass Huge Ironwood Trees within the Palen-McCoy Wilderness; Protect cultural resources associated with the Desert Training Center and the abundance of prehistoric resources.

Where the CMAs in this Special Management Plan conflict from the CMAs included in Volume II of the Proposed LUPA and Final EIS, the more restrictive CMA would be applied (i.e. management that best supports resource conservation and limits impacts to the values for which the conservation unit was designated), unless otherwise specified.

If this area is included in the National Conservation Lands, the BLM will manage this area to protect the Nationally Significant Values above. Appropriate multiple uses will be allowed, consistent with this Special Unit Management Plan and the CMAs in Volume II. If an activity is not specifically covered by the CMAs, it will be allowed if it is consistent with the Nationally Significant Values, but prohibited if the uses conflict with those values.

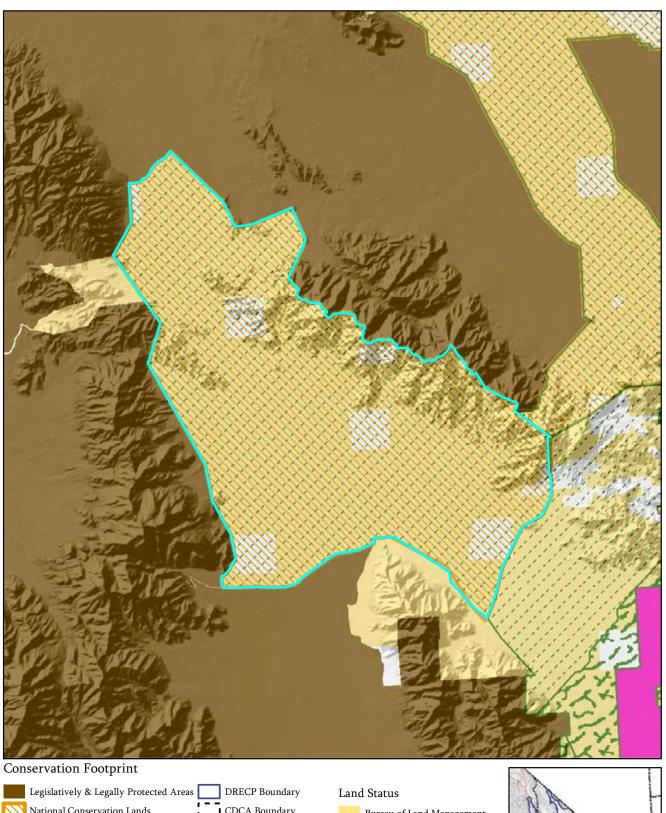
#### **Designation and Acreage by Alternative:**

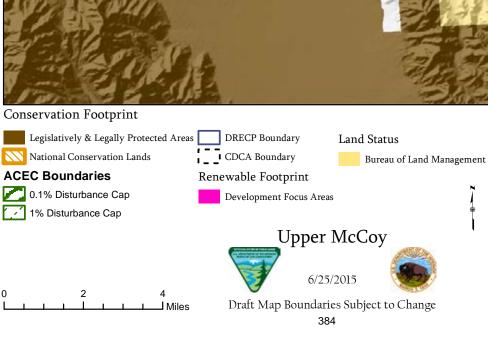
	rior cage by ristermatives			
Alternative	BLM Acres of NLCS within ACEC or Wildlife Allocation	BLM Acres within ACEC	BLM Acres within Wildlife Allocation	ACEC Disturbance Cap
No Action	0	0	0	NA
Preferred Alternative	37,333	37,333	0	1%
1	29,600	0	37,300	Wildlife Allocation
2	37,300	37,300	0	0.25%
3	37,300	37,300	0	1%
4	37,300	37,300	0	1%

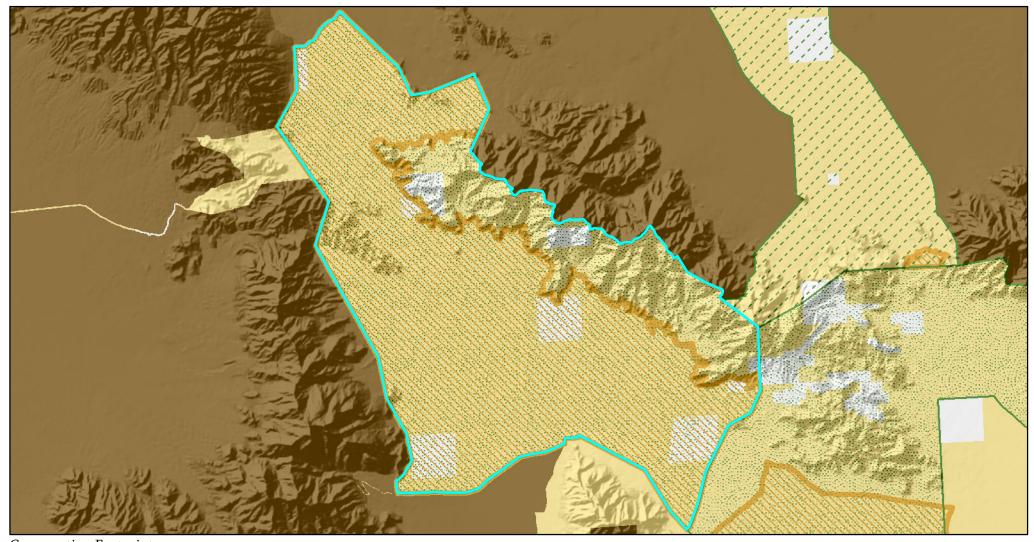
<sup>\*</sup> Acreage values are for BLM managed lands

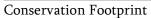
Objectives (desired future condition)/Allowable Uses/Management Actions	Resource
Objective: Prevent excessive ground water withdrawal that would potentially threatened desert dry wash woodland vegetation.  Action: Allow no activities on BLM public lands that would create a water basin deficit/ decline.	Soil, water, air
Objective: Protect the Palen Pass Huge Ironwood Trees, which is an Unusual Plant Assemblage and the watershed for the Midland Ironwood Forest within the Palen-McCoy Wilderness.  Action: Prohibit woodcutting of any kind. Develop a silviculture plan to ensure that young trees are regenerating to sustain the woodland into the future. Foxtail Cactus (Escobaria vivipara var. alversonii) [CNPS 4.3] is the one definitively known special status plant species from this area, although the flora of the area is poorly documented.	Vegetation (incl. special status species)
Objective: Protect habitat for desert tortoises and maintain habitat connectivity. This area contains higher quality habitat for the desert tortoise and is within a critical connectivity area between the Chemehuevi and Chuckwalla desert tortoise critical habitat units/ ACECs.	Fish and Wildlife (incl. special status species)
Objective: Maintain bighorn sheep demes and corridors. Bighorn sheep management goals and objectives are described in Section 2.3.1 in the NECO Plan.	
Objective: Protect habitat for other special status animal species, including the prairie falcon and golden eagle. The area is known foraging habitat for prairie falcons and golden eagles nesting in the adjacent mountains.	
<b>Objective 1</b> : Protect biodiversity and manage for resilience (protect climate refugia and provide for migration corridors).	Climate Change and Adaptation
Management Action 1: Prioritize habitat enhancement in areas expected to provide for the greatest level of resiliency (good response or rehabilitation results after significant disturbance such as fire) and or resistance to change (e.g. climate refugia).	
Management Action 2: Consider actions that enhance the primary productivity of climate refugia with native species restoration, reduced soil surface disturbance, and habitat infrastructure to increase carrying capacity of refugia (e.g., wetland, oasis).	
Management Action 3: Maintain migration corridor integrity by minimizing obstructions (fences, roads), disturbances (limiting access to water and shade during peak temperatures) and habitat fragmentation.	
<b>Objective 2</b> : Maintain and or enhance key ecosystem processes (e.g., carbon sequestration, water residence time) and prepare and respond to significant disturbances to the environment (e.g. floods).	

Management Action 1: Develop proactive and responsive management actions for potentially dangerous and damaging disturbances to the environment, which are exacerbated by climate change (e.g. wildfire, flash floods, etc.).  Management Action 2: Minimize carbon sequestration losses from management activities by reducing impacts to vegetation, soil structure and soil biota.  Management Action 3: Leverage disturbance events and other landscape	
changes, when possible, as opportunities to assess climate adaptation actions. For example, revegetation objectives for projected climate scenarios benefiting multiple ecosystem services (habitat and carbon sequestration objectives).	
Objective: This vast area is surrounded on three sides by Wilderness, giving it a remote and pristine feel. The area will be managed as VRM II.  Action: Restore all undesignated OHV routes to meet VRM class II objectives.	Visual Resources
Objective: Area would be managed within the Eastern Riverside Extensive Recreation Management Area (ERMA). Provide dispersed opportunities focused on enjoyment of the ACEC qualities.	Recreation
Objective: Consolidate through tenure adjustment.  Management Action: Acquire inholdings, edgeholdings and other interests from willing sellers.	Land Tenure
Objective: Protect resource values of the ACEC Management Action: Land use authorization proposals (new, renewal, and amendment) will be analyzed on a case-by-case basis to assess whether they are compatible with the ACEC and its management goals.	Rights of Way
Lands with Wilderness Characteristics (LWC) within the unit are ROW exclusion areas. All relevant and importance values of the NLCS lands in the ACEC must be protected.	
Closed to renewable energy production	Renewable Energy
ACECs are closed to geothermal leasing and development unless they overlap with a DFA where geothermal is allowed. Where there is overlap, ACECs are open to geothermal leasing with an NSO stipulation.	
Continue to allow mineral material disposals on a case by-case basis outside of woodland habitats and subject to site specific environmental analysis. Allow no disposal of mineral material in Lands with Wilderness Characteristics.	Locatable Minerals Mineral Materials Non-energy Leaseables
No-surface occupancy leasable minerals.	









Legislatively & Legally Protected Areas

National Conservation Lands

DRECP Boundary

CDCA Boundary National Conservation Lands

DRECP Boundary Land Status

Bureau of Land Management

**ACEC** Boundaries

1% Disturbance Cap

Wildlife Allocation

## Upper McCoy Alternative 1

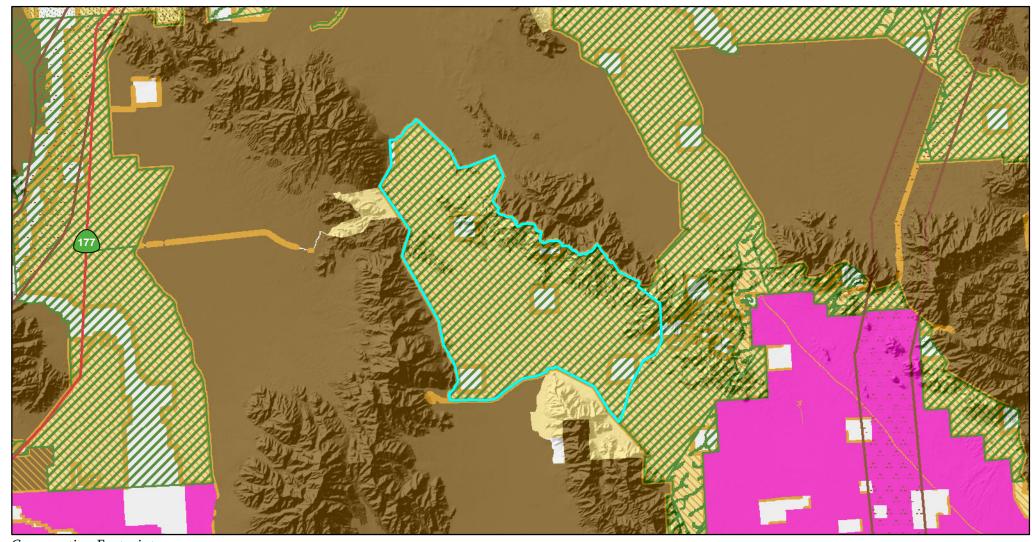
8/25/2015











Legislatively & Legally Protected Areas

National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.25% Disturbance Cap

Wildlife Allocation

Miles

DRECP Boundary CDCA Boundary

Land Status

Bureau of Land Management

Transmission Corridor

Renewable Footprint

Development Focus Areas

## Upper McCoy Alternative 2

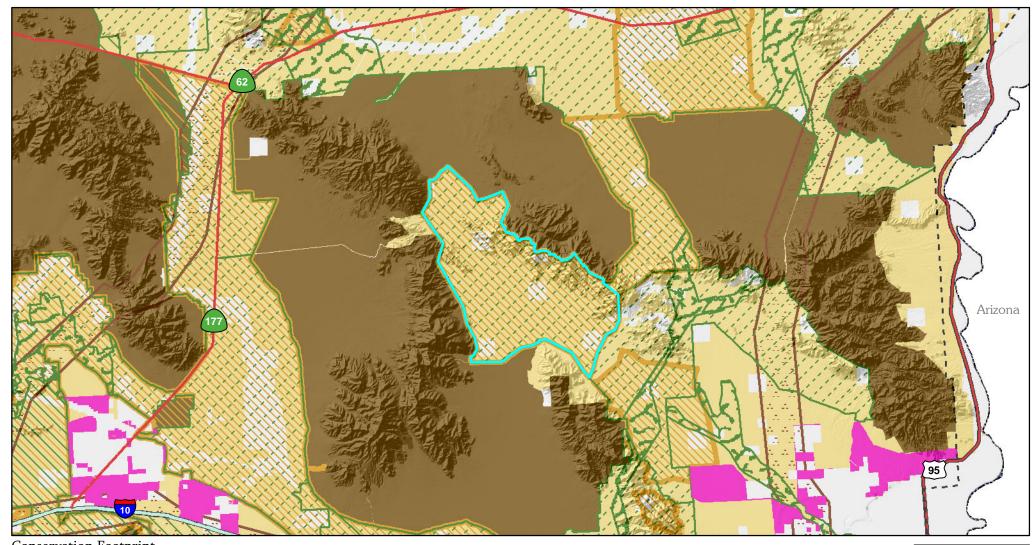
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Legislatively & Legally Protected Areas National Conservation Lands

**ACEC Boundaries** 

0.1% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

LIII Miles

## DRECP Boundary CDCA Boundary

Transmission Corridor

Bureau of Land Management

Land Status

## Renewable Footprint

Development Focus Areas

# Upper McCoy

Alternative 3

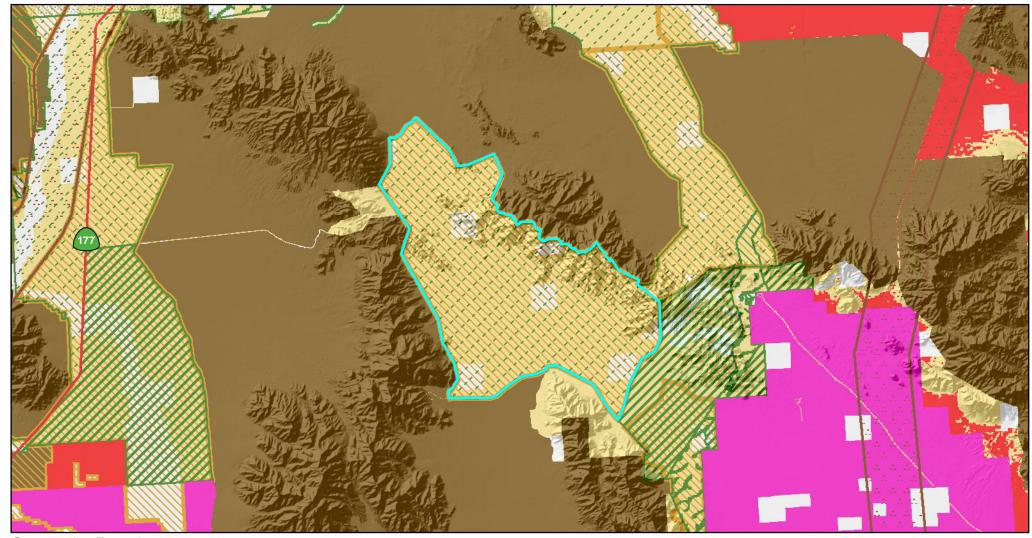
8/27/2015











**ACEC Boundaries** 

0.1% Disturbance Cap

0.25% Disturbance Cap

0.5% Disturbance Cap

1% Disturbance Cap

Wildlife Allocation



DRECP Boundary

CDCA Boundary

Transmission Corridor

Development Focus Areas

Variance Lands

Land Status

Bureau of Land Management

## Upper McCoy Alternative 4

8/27/2015







